LINSCOTT LAW & GREENSPAN
engineers

ACCESS ANALYSIS

BRITANNIA AIRWAY LOGISTICS CENTER

City of San Diego, California
January 3, 2023
PRJ 1048583

LLG Ref. 3-21-3491

Linscott, Law & Greenspan, Engineers
4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
858.300.8810 F
www.llgengineers.com

EXECUTIVE SUMMARY

Linscott, Law & Greenspan Engineers (LLG) has prepared this access analysis to assess the potential transportation impacts associated with the Britannia Airway Logistics Center ("Project") in the Otay Mesa Community within the City of San Diego. The Project site is currently undeveloped and zoned IBT-1-1 located on the south side of Airway Road, west of Britannia Boulevard and east of Cactus Road in the Otay Mesa Community in the City of San Diego. The Project requires a Site Development Permit.

The Project proposes the construction of fenced truck/trailer parking for up to nine (9) tenants/users on approximately 32.47 net acres. Each tenant/user will have a modular trailer office of 720 square feet (sf) with 3 vehicle parking spaces. A total of 871[1] truck/trailer parking spaces are proposed. The Project site is located on the south side of Airway Road, west of Britannia Boulevard, east of Cactus Road in the Otay Mesa Community in the City of San Diego. Access to the site is proposed via seven (7) driveways: one (1) right-in/right-out driveway on Cactus Road approximately 520 feet south of Airway Road, five (5) driveways including three (3) full access driveways, one (1) right-in/right-out driveway, and one (1) right-out only driveway along Airway Road between Cactus Road and Britannia Boulevard, and one (1) right-in/right-out only driveway on Britannia Boulevard approximately 450 feet south of Airway Road. The Proposed Project intends to prepare an Addendum to the approved Otay Mesa Community Plan EIR, and thereby focuses on Level of Service based analysis as the appropriate CEQA metric to evaluate transportation impacts. This study will be based on the guidelines in the City's *Transportation Impact Study Manual (1998)*.

Based on the proposed land uses, the rates found in the City of San Diego's *Trip Generation Manual, May 2003* were used for the proposed Project. The Project is calculated to generate approximately 1,040 ADT with 157 trips (112 inbound / 45 outbound) during the AM peak hour and 166 trips (63 inbound / 103 outbound) during the PM peak hour. The project driveways are proposed to provide access for the nine (9) tenants, with Tenants 2 & 3, 5 & 6, and 7 & 8 sharing driveways, respectively. Project traffic was distributed and assigned to the street system based on the driveway locations/configurations and the percentage of truck/trailer parking provided for each tenant, existing traffic patterns in the area, anticipated traffic patterns to and from the site, and the Project's proximity to state highways and arterials.

A total of 22 cumulative projects were identified for consideration in the Near-Term (Opening Year 2023) scenario. Intersection and street segment impacts were evaluated.

[1] Subsequent to the preparation of this report, the project description was updated to account for designated turnaround spaces at the end of the drive aisle, which reduced the number of truck/trailer parking spaces from 895 to 871. However, this analysis in this report was unchanged to provide a conservative analysis of the higher truck/trailer parking of 895 spaces.

Existing Operations

Table 1 summarizes the peak hour intersection operations under the Existing scenario. As seen in *Table 1*, all study intersections are expected to operate at an acceptable LOS D or better.

Table 2 summarizes the street segment operations under the Existing scenario. As seen in *Table 2*, all study segments are expected to operate at an acceptable LOS C or better except:

- Britannia Boulevard, from Airway Road to Project Driveway #7 – LOS E

Existing + Project Operations

Table 1 summarizes the peak hour intersection operations under the Existing + Project scenario. As seen in *Table 1*, with the addition of Project traffic, all study intersections are expected to operate at an acceptable LOS D or better.

Table 2 summarizes the street segment operations under the Existing + Project scenario. As seen in *Table 2*, with the addition of Project traffic, all study segments are expected to operate at an acceptable LOS D or better except:

- Britannia Boulevard, from Airway Road to Project Driveway #7 – LOS E

Based on the City of San Diego's significance criteria, no impact is identified on the segment listed above since the Project traffic contribution does not exceed the allowable threshold.

TABLE 1
EXISTING + PROJECT INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project		Δ[c]	Sig?
			Delay[a]	LOS[b]	Delay	LOS		
1. Britannia Boulevard / Otay Mesa Road	Signal	AM	27.1	C	28.3	C	1.2	No
		PM	27.7	C	28.5	C	0.8	No
2. Britannia Boulevard / SR 905 WB Ramps	Signal	AM	23.2	C	23.6	C	0.4	No
		PM	28.6	C	29.3	C	0.7	No
3. Britannia Boulevard / SR 905 EB Ramps	Signal	AM	25.9	C	27.7	C	1.8	No
		PM	34.4	C	42.0	D	7.6	No
4. Britannia Boulevard / Airway Road	Signal	AM	46.2	D	49.9	D	3.7	No
		PM	29.6	C	32.8	C	3.2	No
5. Airway Road / Continental Street / Project Driveway #4	TWSC[d]	AM	10.8	B	12.2	B	1.4	No
		PM	10.1	B	11.5	B	1.4	No
6. Airway Road / Cactus Road	OWSC[e]	AM	12.2	B	12.5	B	0.3	No
		PM	10.5	B	10.7	B	0.2	No
7. Cactus Road / Project Driveway #1	OWSC[e]	AM	DNE	–	9.9	A	9.9	No
		PM	DNE	–	9.9	A	9.9	No
8. Airway Road / Project Driveway #2	OWSC[e]	AM	DNE	–	10.2	B	10.2	No
		PM	DNE	–	10.3	B	10.3	No
9. Airway Road / Project Driveway #3	OWSC[e]	AM	DNE	–	10.2	B	10.2	No
		PM	DNE	–	10.3	B	10.3	No
10. Airway Road / Project Driveway #5	OWSC[e]	AM	DNE	–	10.6	B	10.6	No
		PM	DNE	–	11.0	B	11.0	No
11. Airway Road / Project Driveway #6	OWSC[e]	AM	DNE	–	10.6	B	10.6	No
		PM	DNE	–	11.1	B	11.1	No
12. Britannia Boulevard / Project Driveway #7	OWSC[e]	AM	DNE	–	0.0	A	0.0	No
		PM	DNE	–	0.0	A	0.0	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Delay increase due to the project.
d. TWSC – Two-Way Stop Controlled intersection. Worst movement delay is reported.
e. OWSC – One-Way Stop Controlled intersection. Worst movement delay is reported.

General Notes:

1. DNE – does not exist.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLD	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

TABLE 2
EXISTING + PROJECT STREET SEGMENT OPERATIONS

Street Segment	Functional Classification	Existing Capacity (LOS E)[a]	Existing			Existing + Project			Δ[e]	Sig?
			ADT[b]	LOS[c]	V/C[d]	ADT	LOS	V/C		
Cactus Road										
Airway Road to Project Driveway #1	2-lane Collector	8,000	1,320	A	0.165	1,455	A	0.182	0.017	No
Britannia Boulevard										
Otay Mesa Road to SR 905 WB Ramps	6-lane Prime Arterial	60,000	13,400	A	0.223	13,629	A	0.227	0.004	No
SR 905 WB Ramps to SR 905 EB Ramps	6-lane Prime Arterial	60,000	24,510	A	0.409	25,129	B	0.419	0.010	No
SR 905 EB Ramps to Airway Road	5-lane Prime Arterial	50,000	39,200	C	0.784	40,209	D	0.804	0.020	No
Airway Road to Project Driveway #7	3-lane Major Arterial	30,000	27,050	E	0.902	27,258	E	0.909	0.007	No
Airway Road										
Cactus Road to Continental Street	2-Lane Collector	8,000	1,880	A	0.235	2,202	A	0.275	0.040	No
Continental Street to Britannia Boulevard	3-Lane Collector	15,000	2,670	A	0.178	3,502	A	0.233	0.055	No

Footnotes:

a. Capacities based on City of San Diego's Roadway Classification & LOS table (*See Appendix C*).
b. Average Daily Traffic
c. Level of Service
d. Volume to Capacity ratio
e. Δ denotes a project-induced increase in the Volume to Capacity ratio

Near-Term (Opening Year 2023) Operations
Near-Term (Opening Year 2023) traffic volumes were calculated for the study area by adding the total cumulative projects traffic volumes.

Table 3 summarizes the peak hour intersection operations under the Near-Term (Opening Year 2023) conditions. As seen in *Table 3*, all intersections are expected to operate at an acceptable LOS D or better.

Table 4 summarizes the street segment operations under the Near-Term (Opening Year 2023) conditions. As seen in *Table 4*, all segments are expected to operate at an acceptable LOS B or better except:

- Britannia Boulevard, from SR 905 EB Ramps to Airway Road – LOS E
- Britannia Boulevard, from Airway Road to Project Driveway #7 – LOS E

Near-Term (Opening Year 2023) + Project Operations
Near-Term (Opening Year 2023) + Project traffic volumes were calculated by adding the Project traffic volumes to the Near-Term (Opening Year 2023) traffic volumes.

Table 3 summarizes the peak hour intersection operations under the Near-Term (Opening Year 2023) + Project conditions. As seen in *Table 3*, with the addition of Project traffic, all intersections are expected to operate at an acceptable LOS D or better.

Table 4 summarizes the street segment operations under the Near-Term (Opening Year 2023) + Project conditions. As seen in *Table 4*, with the addition of Project traffic, all segments are expected to operate at an acceptable LOS B or better except:

- Britannia Boulevard, from SR 905 EB Ramps to Airway Road – LOS E
- Britannia Boulevard, from Airway Road to Project Driveway #7 – LOS E

Based on the City of San Diego's significance criteria, no impacts are identified on the segments listed above since the Project traffic contribution does not exceed the allowable threshold.

Based on the City of San Diego's significance criteria, no significant impacts are identified within the study area. Therefore, mitigation measures are not necessary.

TABLE 3
NEAR-TERM (OPENING YEAR 2023) INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Near-Term (Opening Year 2023)		Near-Term (Opening Year 2023) + Project		Δ[c]	Sig?
			Delay[a]	LOS[b]	Delay	LOS		
1. Britannia Boulevard / Otay Mesa Road	Signal	AM	27.6	C	28.7	C	1.1	No
		PM	28.6	C	29.4	C	0.8	No
2. Britannia Boulevard / SR 905 WB Ramps	Signal	AM	23.7	C	23.9	C	0.2	No
		PM	29.2	C	29.9	C	0.7	No
3. Britannia Boulevard / SR 905 EB Ramps	Signal	AM	30.9	C	35.2	D	4.3	No
		PM	39.5	D	49.1	D	9.6	No
4. Britannia Boulevard / Airway Road	Signal	AM	47.5	D	54.4	D	6.9	No
		PM	42.9	D	51.7	D	8.8	No
5. Airway Road / Continental Street / Project Driveway #4	TWSC[d]	AM	17.0	C	24.8	C	7.8	No
		PM	12.1	B	14.9	B	2.8	No
6. Airway Road / Cactus Road	OWSC[e]	AM	12.2	B	12.5	B	0.3	No
		PM	10.6	B	10.7	B	0.1	No
7. Cactus Road / Project Driveway #1	OWSC[e]	AM	DNE	–	9.9	A	9.9	No
		PM	DNE	–	9.9	A	9.9	No
8. Airway Road / Project Driveway #2	OWSC[e]	AM	DNE	–	10.2	B	10.2	No
		PM	DNE	–	10.4	B	10.4	No
9. Airway Road / Project Driveway #3	OWSC[e]	AM	DNE	–	10.2	B	10.2	No
		PM	DNE	–	10.4	B	10.4	No
10. Airway Road / Project Driveway #5	OWSC[e]	AM	DNE	–	12.6	B	12.6	No
		PM	DNE	–	12.0	B	12.0	No
11. Airway Road / Project Driveway #6	OWSC[e]	AM	DNE	–	12.7	B	12.7	No
		PM	DNE	–	12.2	B	12.2	No
12. Britannia Boulevard / Project Driveway #7	OWSC[e]	AM	DNE	–	0.0	A	0.0	No
		PM	DNE	–	0.0	A	0.0	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Delay increase due to the project.
d. TWSC – Two-Way Stop Controlled intersection. Worst movement delay is reported.
e. OWSC – One-Way Stop Controlled intersection. Worst movement delay is reported.

General Notes:

1. DNE – does not exist.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

TABLE 4
NEAR-TERM (OPENING YEAR 2023) STREET SEGMENT OPERATIONS

Street Segment	Functional Classification	Existing Capacity (LOS E)[a]	Near-Term (Opening Year 2023)			Near-Term (Opening Year 2023) + Project			Δ[e]	Sig?
			ADT[b]	LOS[c]	V/C[d]	ADT	LOS	V/C		
Cactus Road										
Airway Road to Project Driveway #1	2-lane Collector	8,000	1,350	A	0.169	1,485	A	0.186	0.017	No
Britannia Boulevard										
Otay Mesa Road to SR 905 WB Ramps	6-lane Prime Arterial	60,000	16,295	A	0.272	16,524	A	0.275	0.003	No
SR 905 WB Ramps to SR 905 EB Ramps	6-lane Prime Arterial	60,000	33,041	B	0.551	33,660	B	0.561	0.010	No
SR 905 EB Ramps to Airway Road	5-lane Prime Arterial	50,000	45,008	E	0.900	46,017	E	0.920	0.020	No
Airway Road to Project Driveway #7	3-lane Major Arterial	30,000	29,218	E	0.974	29,426	E	0.981	0.007	No
Airway Road										
Cactus Road to Continental Street	2-Lane Collector	8,000	2,053	A	0.257	2,375	A	0.297	0.040	No
Continental Street to Britannia Boulevard	3-Lane Collector	15,000	5,567	B	0.371	6,399	B	0.427	0.056	No

Footnotes:
a. Capacities based on City of San Diego's Roadway Classification & LOS table (*See Appendix C*).
b. Average Daily Traffic
c. Level of Service
d. Volume to Capacity ratio
e. Δ denotes a project-induced increase in the Volume to Capacity ratio

Site Access

The specifics of the seven driveways are shown on page i. Three (3) full access driveways on Airway Road, which include an easterly driveway proposed approximately 670' from the Britannia Boulevard / Airway Road intersection, the middle full access driveway is proposed at Continental Street and the westerly full access driveway is proposed approximately 740' from Continental Street and approximately 450' from Cactus Road.

The Project proposes gates at all the driveways. These gates will remain open during business hours to ensure that trucks entering the Project site would not queue onto the public ROW.

Vehicular queuing was evaluated using SimTraffic 11 for the westbound left-turning lanes at the proposed Project driveways (i.e., Driveways #2, #4, and #5) along Airway Road where left-turn pockets are proposed. ***Table 5*** shows the 95th percentile queues based on 60-minute recording time, 15-minute seed, and an average of 10 simulations. Based on the queue analysis, the westbound left-turning queues at Driveways #2, #4, and #5 are expected to be contained within the proposed storage length. Therefore, no queuing issues are identified.

TABLE 5
DRIVEWAY QUEUE ANALYSIS

Intersection	Movement	Peak Hour	Existing + Project		Near-Term (Opening Year 2023) + Project	
			Proposed Storage	Queue Length	Proposed Storage	Queue Length
5. Airway Road / Continental Street / Project Driveway #4	WBL	AM	175'	37'	175'	38'
		PM		27'		27'
8. Airway Road / Project Driveway #2	WBL	AM	185'	28'	185'	37'
		PM		27'		20'
10. Airway Road / Project Driveway #5	WBL	AM	197'	39'	197'	54'
		PM		29'		31'

General Notes:
1. 95th percentile queues reported.
2. Vehicular (including heavy vehicles) queuing was evaluated using SimTraffic 11 based on 60-minute recording time and 15-min seeding on average of 10 simulations.

Additionally, a peak hour signal warrant (Warrant 3: Peak Hour) analysis was conducted at the Airway Road / Continental Street intersection under the Near-Term + Project (Opening Year 2023) conditions. Based on the analysis, it is concluded that the peak hour signal warrant is not met at this intersection under the Near-Term + Project (Opening Year 2023) conditions.

Project Frontage Improvements

Consistent with the Airway Road ultimate classification of a 6-lane Major, per the City of San Diego Street Design Manual, the Project is proposing to widen Airway Road and construct a raised median along the Project frontage provide half-width improvements to include a 54' centerline-to-curb width and a 27' parkway. This 27' parkway width would include a 8.5' landscape buffer, 2' buffer, 8' Class I bike path, 2' buffer and a 6' non-contiguous sidewalk, consistent with the Central Village Specific Plan approved by City Council on April 4, 2017, with the exception of 8' Class bike path (vs. 10' Class I bike path in the Central Village Specific Plan), which is required in order to provide a cross section consistent with City of San Diego Green Street standards.

Consistent with the Britannia Boulevard ultimate classification of a 6-lane Major, per the City of San Diego Street Design Manual, the Project is proposing to widen Britannia Boulevard along the Project frontage to provide half-width improvements to include a 75' centerline-to-curb width and a 20' parkway. This 20' parkway width would provide accommodation for a 14' landscape buffer and a 6' non-contiguous sidewalk.

Consistent with the Cactus Road ultimate classification of a 4-lane Major, per the City of San Diego Street Design Manual, the Project is proposing to widen Cactus Road and construct a raised median along the Project frontage provide half-width improvements to include a 60'-76' centerline-to-curb width and a 22' parkway. This 22' parkway width would provide accommodation for a 16' landscape buffer and a 6' non-contiguous sidewalk.

Table 6 shows the Near-Term (Opening Year 2023) street segment operations for streets segments fronting the Project site with the Project frontage improvements. As seen in *Table 5*, the street segments fronting the Project site are expected to operate at LOS C or better with the Project frontage improvements.

TABLE 6
NEAR-TERM (OPENING YEAR 2023) + PROJECT STREET SEGMENT OPERATIONS WITH FRONTAGE IMPROVEMENTS

Street Segment	Functional Classification	Existing Capacity (LOS E)[a]	Near-Term + Project		Future Classification	Future Capacity (LOS E)[a]	Near-Term + Project	
			ADT[b]	LOS[c]			ADT	LOS
Cactus Road								
Airway Road to Project Driveway #1	2-lane Collector	8,000	1,350	A	3-lane Major Arterial	30,000	1,350	A
Britannia Boulevard								
Airway Road to Project Driveway #7	3-lane Major Arterial	30,000	29,426	E	4-lane Major Arterial	40,000	29,426	C
Airway Road								
Cactus Road to Continental Street	2-lane Collector	8,000	2,053	A	4-lane Major Arterial	40,000	2,053	A
Continental Street to Britannia Boulevard	3-lane Collector	15,000	5,567	B	4-lane Major Arterial	40,000	5,567	A

Footnotes:
a. Capacities based on City of San Diego's Roadway Classification & LOS table (*See Appendix C*).
b. Average Daily Traffic
c. Level of Service

Complete Communities: Mobility Choices

The San Diego Municipal Code (SDMC) Complete Communities: Housing Solutions and Mobility Choices was adopted on December 9, 2020. Ordinance O-21274 provides the development regulations for the Mobility Choices portion of the Complete Communities program. According to the ordinance, the Project is located in Mobility Zone 2. Mobility Zone 2 means any premises located either partially or entirely within a Transit Priority Area (TPA). For development in Mobility Zone 2, SDMC Section 143.1103(b)(1) identifies the requirement to provide VMT Reduction Measures totaling at least 5 points as identified in the City of San Diego's Land Development Manual Appendix T. The Project will provide at least 5 points through the following measures:

- The Project will install new bicycle infrastructure on Airway Road along the project frontage, which will include a Class II buffered bike lane and a Class I bike path. (3 points)
- The Project will provide three (3) long-term bicycle parking spaces, which is more than 10% beyond the minimum requirement. (2.5 points)

Parking Summary

The City of San Diego minimum parking requirements for the proposed Project were also evaluated. A minimum of 22 parking spaces are required and 27 parking spaces will be provided. The Project meets the City's parking requirements, and it is concluded that sufficient parking will be provided on the Project site for the expected operation.

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ACCESS ANALYSIS

BRITANNIA AIRWAY LOGISTICS CENTER

City of San Diego, California
January 3, 2023

1.0 INTRODUCTION

Linscott, Law & Greenspan Engineers (LLG) has prepared this access analysis to assess the potential transportation impacts associated with the Britannia Airway Logistics Center ("Project") in the Otay Mesa Community within the City of San Diego. The Project site is currently undeveloped and zoned IBT-1-1. The Project site is located on the south side of Airway Road, west of Britannia Boulevard and east of Cactus Road. The Project requires a Site Development Permit. ***Figure 1–1*** shows the vicinity map. ***Figure 1–2*** shows a more detailed Project area map.

The following items are included in this access analysis:

- Project Description
- Existing Conditions Discussion
- Analysis Approach and Methodology
- Significance Criteria
- Existing Conditions Analysis
- Trip Generation/Distribution/Assignment
- Existing Plus Project Analysis
- Cumulative Projects Discussion
- Opening Day (Year 2023) Analysis
- Opening Day (Year 2023) + Project Analysis
- Site Access and Signal Warrant Analysis
- Parking
- Active Transportation
- Complete Communities: Mobility Choices
- Significant Project Impacts and Mitigation Measures

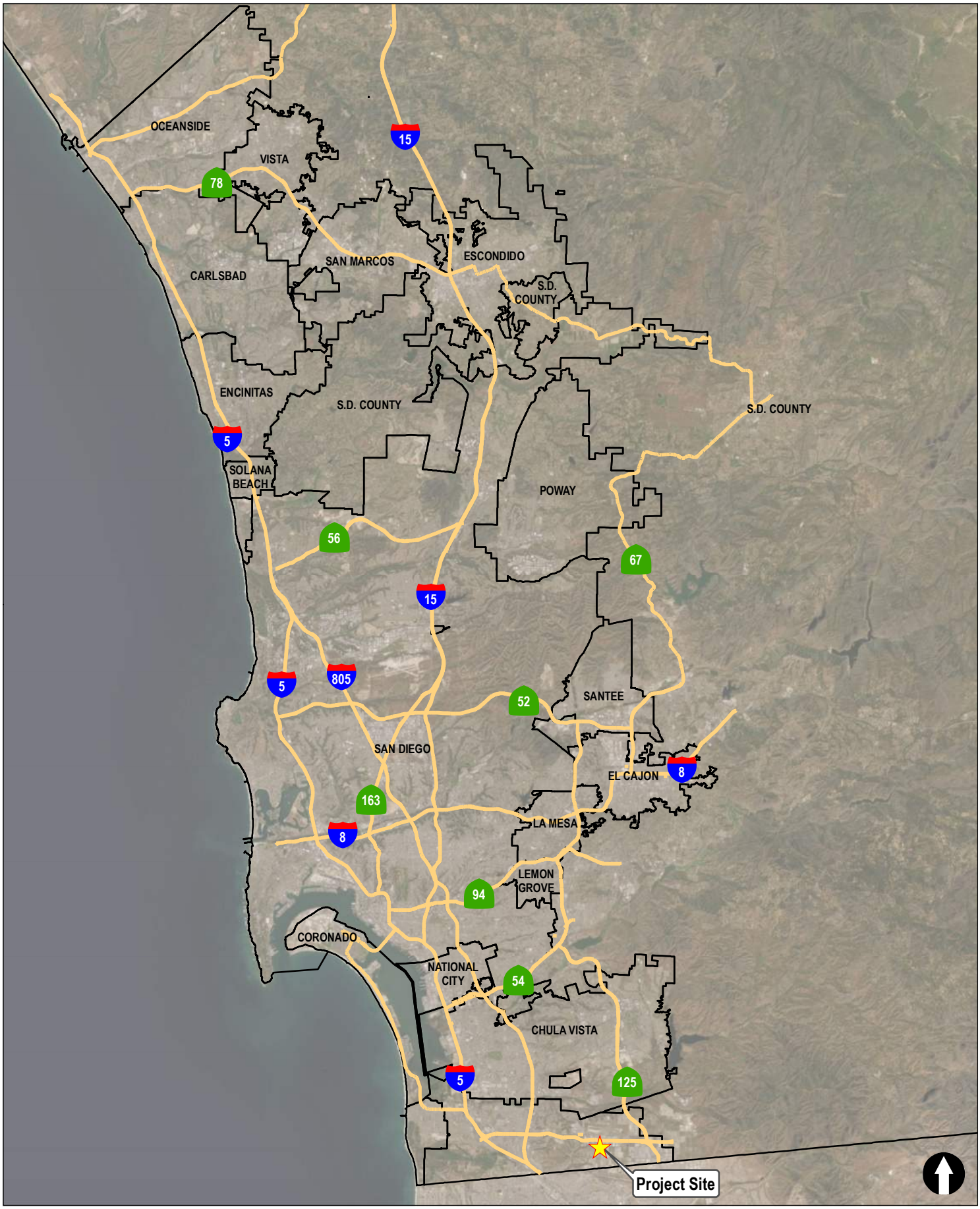

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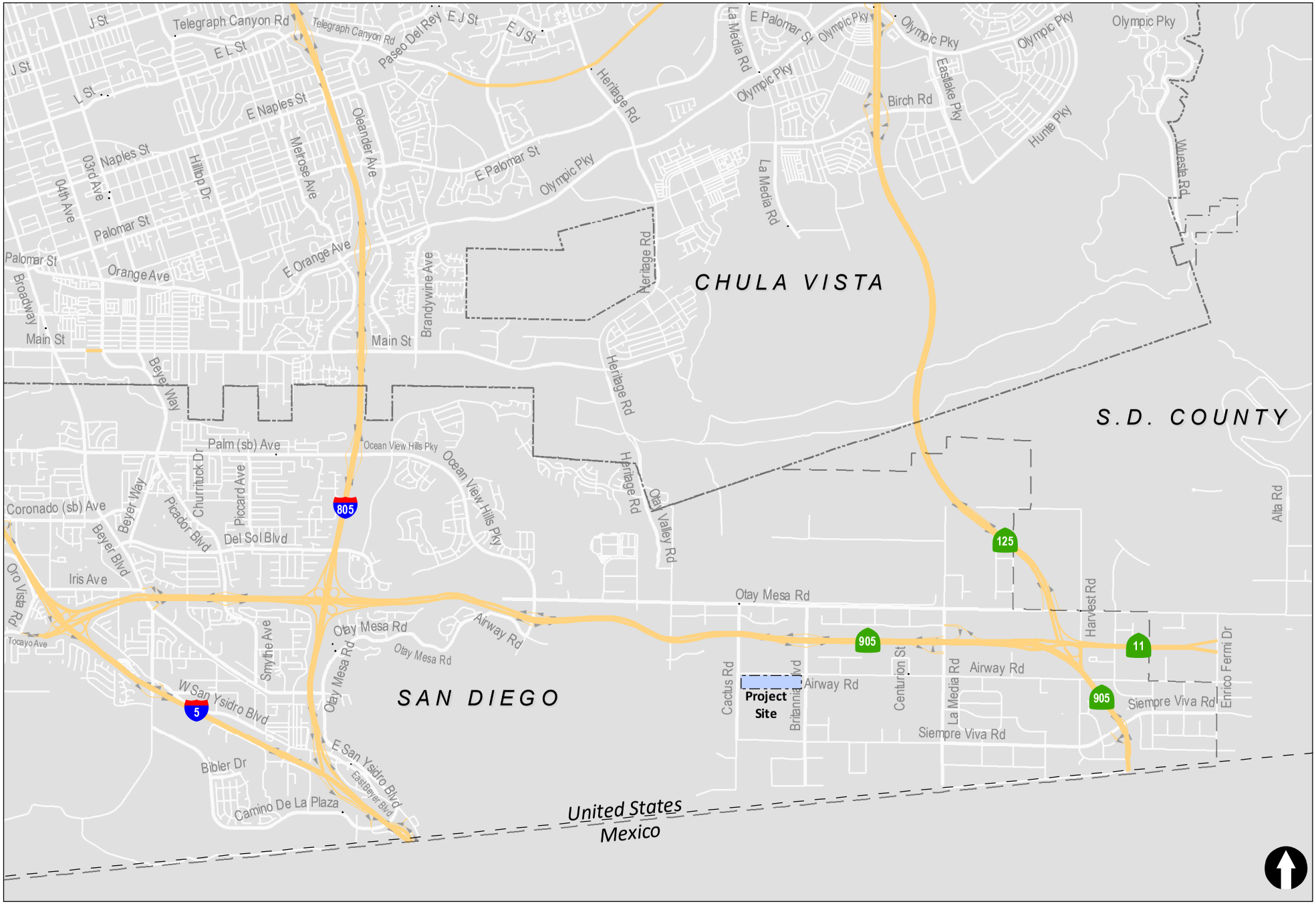
Figure 1-1

Vicinity Map

Britannia Airway Logistics Center



LINSCOTT LAW & GREENSPAN engineers

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Figure 1-2

Project Area Map

Britannia Airway Logistics Center

2.0 PROJECT DESCRIPTION

The Project proposes the construction of fenced truck/trailer parking for up to nine (9) tenants/users on approximately 32.47 net acres. Each tenant/user will have a modular trailer office of 720 square feet (sf) with 3 vehicle parking spaces. A total of 871[2] truck/trailer parking spaces are proposed. The Project site is located on the south side of Airway Road, west of Britannia Boulevard, east of Cactus Road in the Otay Mesa Community in the City of San Diego.

Access to the site is proposed via seven (7) driveways: one (1) right-in/right-out only driveway on Cactus Road approximately 520 feet south of Airway Road, five (5) driveways including three (3) full access driveways, one (1) right-in/right-out driveway and one (1) right-out only driveway along Airway Road between Cactus Road and Britannia Boulevard, and one (1) right-in/right-out only driveway on Britannia Boulevard approximately 450 feet south of Airway Road. The Proposed Project intends to prepare an Addendum to the approved Otay Mesa Community Plan EIR, and thereby focuses on Level of Service based analysis as the appropriate CEQA metric to evaluate transportation impacts. This study will be based on the guidelines in the City's *Transportation Impact Study Manual (1988)*. ***Figure 2–1*** shows the proposed site plan.

[2] Subsequent to the preparation of this report, the project description was updated to account for designated turnaround spaces at the end of the drive aisle, which reduced the number of truck/trailer parking spaces from 895 to 871. However, this analysis in this report was unchanged to provide a conservative analysis of the higher truck/trailer parking of 895 spaces.

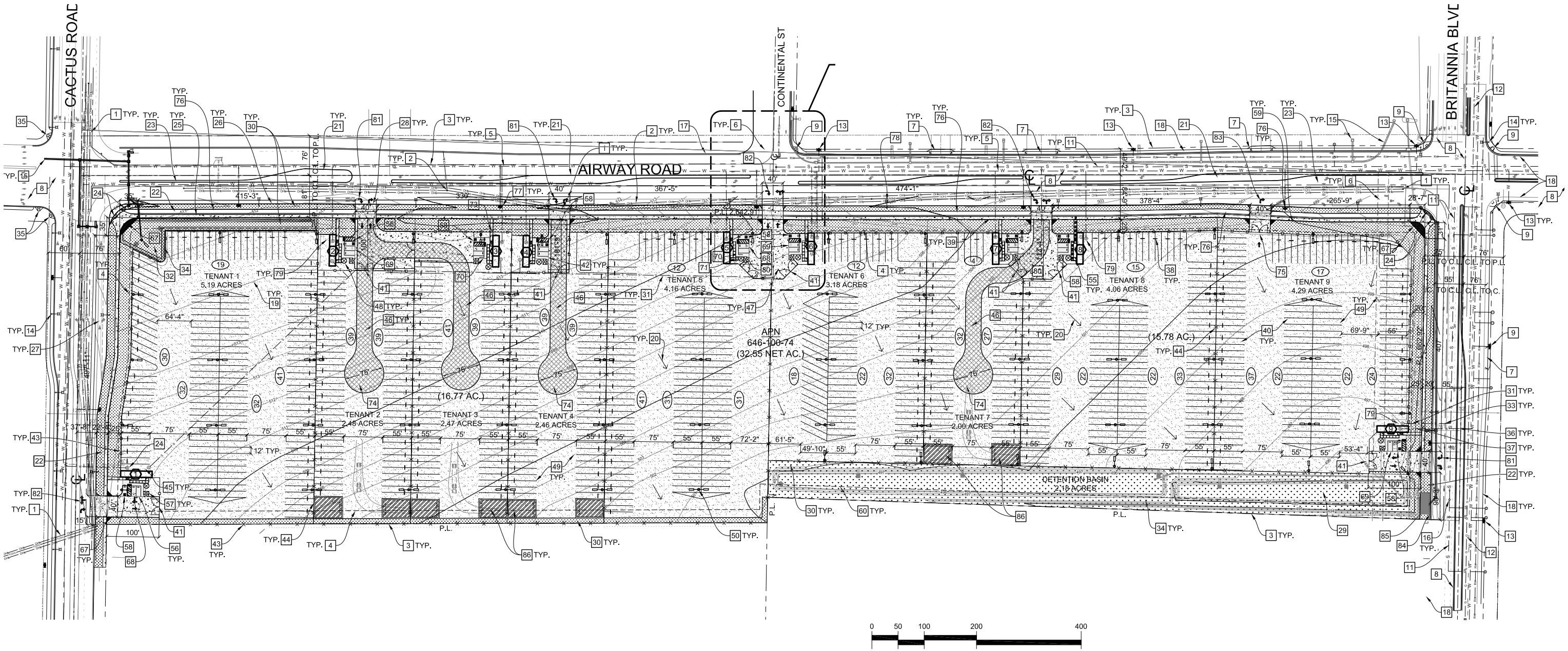

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Figure 2-1

Site Plan

Britannia Airway Logistics Center

3.0 EXISTING CONDITIONS

Evaluation of the traffic impacts associated with the proposed Project requires an understanding of the existing transportation system within the Project area. ***Figure 3–1*** shows an existing conditions diagram, including intersection traffic control type and lane configurations. The study area includes the following intersections and street segments based on the anticipated distribution of the Project traffic:

Intersections:

1. Otay Mesa Road / Britannia Boulevard
2. Britannia Boulevard / SR 905 WB Ramps
3. Britannia Boulevard / SR 905 EB Ramps
4. Britannia Boulevard / Airway Road
5. Airway Road / Continental Street / Project Driveway #4
6. Airway Road / Cactus Road
7. Cactus Road / Project Driveway #1 (*Does not exist)*
8. Airway Road / Project Driveway #2 (*Does not exist)*
9. Airway Road / Project Driveway #3 (*Does not exist)*
10. Airway Road / Project Driveway #5 (*Does not exist)*
11. Airway Road / Project Driveway #6 (*Does not exist)*
12. Britannia Boulevard / Project Driveway #7 (*Does not exist)*

Segments:

Cactus Road

- Airway Road to Project Driveway #1

Britannia Boulevard

- Otay Mesa Road to SR 905 WB Ramps
- SR 905 WB Ramps to SR 905 EB Ramps
- SR 905 EB Ramps to Airway Road
- Airway Road to Project Driveway #7

Airway Road

- Cactus Road to Continental Street
- Continental Street to Britannia Boulevard

3.1 Existing Street Network

The following is a description of the existing street network in the study area.

State Route 905 (SR 905) is a 6-lane freeway that provides a direct east-west connection from I-805 to the Otay Mesa Port of Entry with an interchange at Britannia Road within the study area. The posted speed limit is 65mph.

Airway Road is currently constructed as a 2-lane Collector between Cactus Road and Continental Street and as a 3-lane Collector between Continental Street and Britannia Boulevard. Airway Road between Cactus Road and Britannia Boulevard is classified as a 6-lane Major Road in the City's *Otay Mesa Community Plan Mobility Element*. On the western portion, there is a shoulder with a painted edge line to the traveled way. Per the Otay Mesa Community Plan, Class II bicycle lanes are planned on Airway Road, with an additional Class I bicycle facility planned on the south side. Contiguous sidewalks, curb, and gutter are provided on the north side between Continental Street and Britannia Boulevard. Eastbound and westbound bus stops for MTS Route 909 are located on Airway Road approximately 440' east of Britannia Boulevard. The posted speed limit is 35 mph.

Britannia Boulevard is currently constructed as a 6-lane Prime Arterial between Otay Mesa Road and SR 905 EB Ramps, as a 5-lane (3 southbound lanes and 2 northbound lanes) Prime Arterial between SR 905 EB Ramps and Airway Road, and as a 3-lane Major Arterial between Airway and Project Driveway #7. Britannia Boulevard is classified as a 6-lane Prime Arterial from Otay Mesa Road to Airway Road and as a 6-lane Major Arterial from Airway Road to Siempre Viva Road in the City's *Otay Mesa Community Plan Mobility Element*. Curbside parking is prohibited. Bike lanes are provided in both directions. Contiguous sidewalks are provided on both sides of Britannia Boulevard between Otay Mesa Road and Airway Road. Bus stops for MTS Route 909 are provided on Britannia Boulevard, approximately 160' south of Otay Mesa Road. The posted speed limit is 40 mph.

Cactus Road is currently constructed as a 2-lane Collector in the Project vicinity. Cactus Road between Airway Road and Siempre Viva Road is classified as a 4-lane Major Road in the City's *Otay Mesa Community Plan Mobility Element*. Bike lanes are not provided. Per the Otay Mesa Community Plan, Class II bicycle lanes are planned on Cactus Road. No sidewalk currently exists on either side of Cactus Road between Airway Road and the proposed Project driveway. The posted speed limit is 35 mph.

3.2 Existing Traffic Volumes

Existing weekday daily street segment counts and AM and PM peak hour (7:00-9:00 AM and 4:00-6:00 PM) intersection counts (including bicycle and pedestrian counts) were conducted on Thursday, April 21, 2022.

Figure 3–2 shows the Existing Traffic Volumes. ***Appendix A*** contains the traffic count sheets and the signal timing sheets.

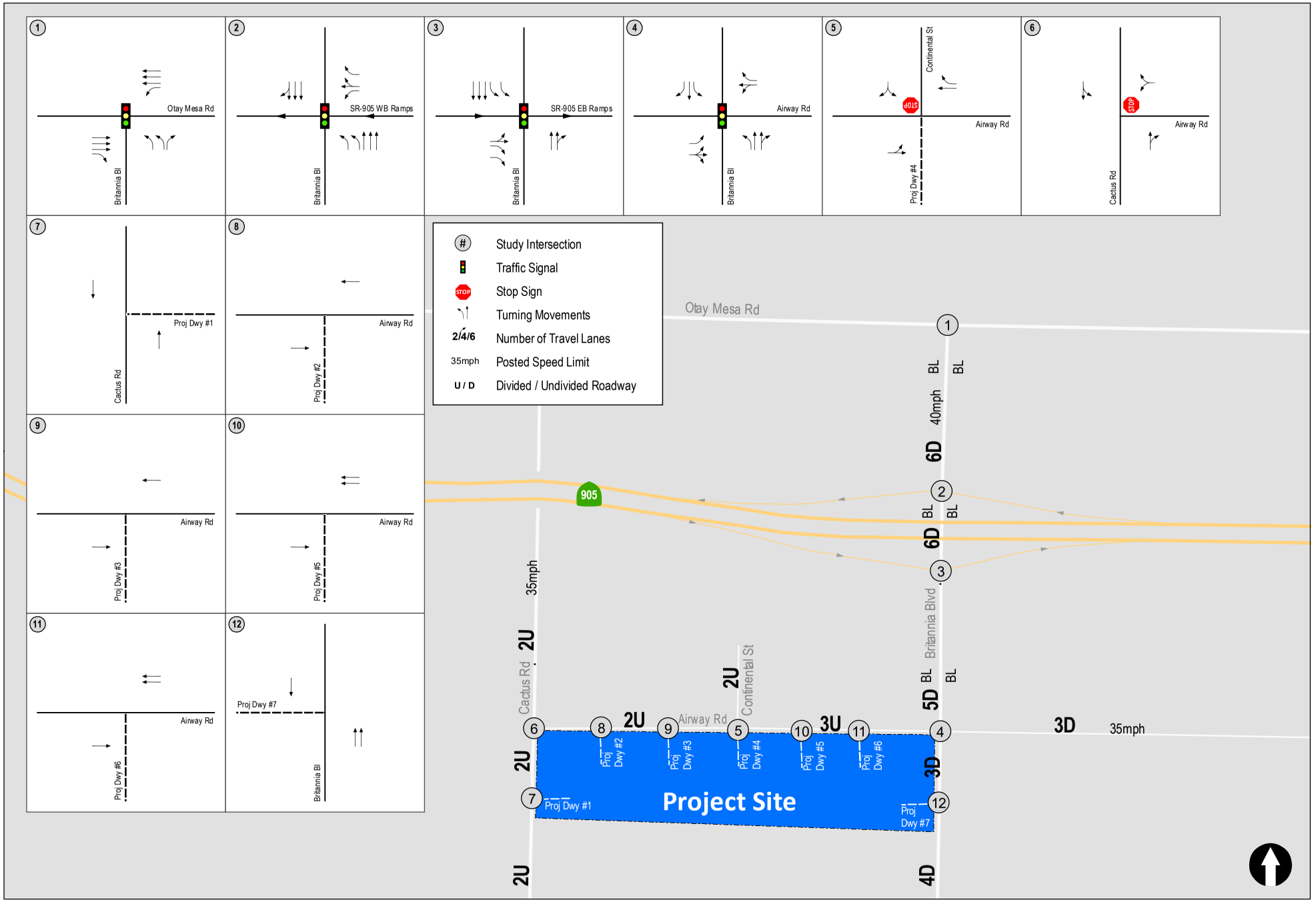

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Figure 3-1

Existing Conditions Diagram

Britannia Airway Logistics Center

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Figure 3-2

Existing Traffic Volumes

Britannia Airway Logistics Center

4.0 ANALYSIS APPROACH AND METHODOLOGY

Level of service (LOS) is the term used to denote the different operating conditions which occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. Level of service provides an index to the operational qualities of a roadway segment or an intersection. Level of service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. Level of service designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments.

4.1 Intersections

Signalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapter 19 of the *Highway Capacity Manual 6th Edition (HCM 6),* with the assistance of the *Synchro 11* computer software. The delay values (represented in seconds) were qualified with a corresponding intersection Level of Service (LOS). Signalized intersection calculation worksheets and a more detailed explanation of the methodology are attached in ***Appendix B***.

Unsignalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay and Levels of Service (LOS) was determined based upon the procedures found in Chapter 20 of the *Highway Capacity Manual 6th Edition (HCM 6),* with the assistance of the *Synchro 11* computer software. Unsignalized intersection calculation worksheets and a more detailed explanation of the methodology are attached in *Appendix B.*

Vehicle classification counts were reviewed from other recently approved development projects in the area, which included a 16% heavy vehicle factor that was applied to all study intersections for this analysis. Since the Project will be mostly utilized by trucks/trailers, a 100% heavy vehicle factor was applied to the movements entering and exiting the Project site.

4.2 Street Segments

Street segment analysis is based upon the comparison of daily traffic volumes (ADTs) to the City of San Diego's *Roadway Classification, Level of Service, and ADT Table*. This table provides segment capacities for different street classifications, based on traffic volumes and roadway characteristics. The City of San Diego's *Roadway Classification, Level of Service, and ADT Table* is attached in ***Appendix C.***

5.0 SIGNIFICANCE CRITERIA

According to the City of San Diego's *Significance Determination Thresholds* dated July 2016, a project is considered to have a significant impact if project traffic would decrease the operations of surrounding roadways by a defined threshold. The City defined thresholds are shown in ***Table 5–1***.

The impact is designated either a "direct" or "cumulative" impact. According to the City's *Significance Determination Thresholds*,

> *"Direct* traffic impacts are those projected to occur at the time a proposed development becomes operational, including other developments not presently operational but which are anticipated to be operational at that time (near term)."
>
> *"Cumulative* traffic impacts are those projected to occur at some point after a proposed development becomes operational, such as during subsequent phases of a project and when additional proposed developments in the area become operational (short-term cumulative) or when affected community plan area reaches full planned buildout (long-term cumulative)."
>
> It is possible that a project's near term (direct) impacts may be reduced in the long term, as future projects develop and provide additional roadway improvements (for instance, through implementation of traffic phasing plans). In such a case, the project may have direct impacts but not contribute considerably to a cumulative impact."
>
> For intersections and roadway segments affected by a project, level of service (LOS) D or better is considered acceptable under both direct and cumulative conditions."

If the project exceeds the thresholds in *Table 5–1*, then the project is considered to have a significant "direct" or "cumulative" project impact. A significant impact can also occur if a project causes the Level of Service to degrade from D to E, even if the allowable increases in *Table 5–1* are not exceeded. A feasible mitigation measure will need to be identified to return the impact within the City thresholds, or the impact will be considered significant and unmitigated.

TABLE 5–1
CITY OF SAN DIEGO
TRAFFIC IMPACT SIGNIFICANT THRESHOLDS

Level of Service with Project[b]	Allowable Increase Due to Project Impacts[a]	
	Roadway Segments	Intersections
	V/C	Delay (sec.)
E	0.02	2.0
F	0.01	1.0

Footnotes:

a. If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are determined to be significant. The project applicant shall then identify feasible improvements (within the Traffic Impact Study) that will restore/and maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see note b), or if the project adds a significant amount of peak-hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating the project's direct significant and/or cumulatively considerable traffic impacts.

b. All LOS measurements are based upon Highway Capacity Manual procedures for peak-hour conditions. However, V/C ratios for roadway segments are estimated on an ADT/24-hour traffic volume basis (using Table 2 of the City's Traffic Impact Study Manual). The acceptable LOS for roadways and intersections is generally "D" ("C" for undeveloped locations).

General Notes:

1. Delay = Average control delay per vehicle measured in seconds for intersections or minutes for ramp meters
2. LOS = Level of Service
3. V/C = Volume to Capacity ratio

6.0 ANALYSIS OF EXISTING CONDITIONS

6.1 Peak Hour Intersection Levels of Service

Table 6–1 summarizes the peak hour intersection operations under Existing conditions. As seen in *Table 6–1*, the study intersections are calculated to currently operate at LOS D or better.

Appendix D contains the existing intersection analysis worksheets.

6.2 Daily Street Segment Levels of Service

Table 6–2 summarizes the street segment operations under the Existing conditions. As seen in *Table 6–2*, the following study segment is calculated to currently operate at LOS E:

- Britannia Boulevard, from Airway Road to Project Driveway #7

TABLE 6–1
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing	
			Delay[a]	LOS[b]
1. Otay Mesa Road / Britannia Boulevard	Signal	AM	27.1	C
		PM	27.7	C
2. Britannia Boulevard / SR 905 WB Ramps	Signal	AM	23.2	C
		PM	28.6	C
3. Britannia Boulevard / SR 905 EB Ramps	Signal	AM	25.9	C
		PM	34.4	C
4. Britannia Boulevard / Airway Road	Signal	AM	46.2	D
		PM	29.6	C
5. Airway Road / Continental Street / Project Driveway #4	TWSC[c]	AM	10.8	B
		PM	10.1	B
6. Airway Road / Cactus Road	OWSC[d]	AM	12.2	B
		PM	10.5	B
7. Cactus Road / Project Driveway #1	OWSC[d]	AM	DNE	–
		PM	DNE	–
8. Airway Road / Project Driveway #2	OWSC[d]	AM	DNE	–
		PM	DNE	–
9. Airway Road / Project Driveway #3	OWSC[d]	AM	DNE	–
		PM	DNE	–
10. Airway Road / Project Driveway #5	OWSC[d]	AM	DNE	–
		PM	DNE	–
11. Airway Road / Project Driveway #6	OWSC[d]	AM	DNE	–
		PM	DNE	–
12. Britannia Boulevard / Project Driveway #7	OWSC[d]	AM	DNE	–
		PM	DNE	–

Footnotes:
a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. TWSC – Two-Way Stop Controlled intersection. Worst movement delay is reported.
d. OWSC – One-Way Stop Controlled intersection. Worst movement delay is reported.

General Notes:
1. DNE – Project driveways do not currently exist.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

TABLE 6–2
EXISTING STREET SEGMENT OPERATIONS

Street Segment	Functional Classification	Capacity (LOS E) [a]	ADT [b]	LOS [c]	V/C [d]
Cactus Road					
Airway Road to Project Driveway #1	2-Lane Collector	8,000	1,320	A	0.165
Britannia Boulevard					
Otay Mesa Road to SR 905 WB Ramps	6-lane Prime Arterial	60,000	13,400	A	0.223
SR 905 WB Ramps to SR 905 EB Ramps	6-lane Prime Arterial	60,000	24,510	A	0.409
SR 905 EB Ramps to Airway Road	5-lane Prime Arterial	50,000	39,200	C	0.784
Airway Road to Project Driveway #7	3-lane Major Arterial	30,000	27,050	E	0.902
Airway Road					
Cactus Road to Continental Street	2-Lane Collector	8,000	1,880	A	0.235
Continental Street to Britannia Boulevard	3-Lane Collector	15,000	2,670	A	0.178

Footnotes:

a. Capacities based on City of San Diego's Roadway Classification Table.

b. Average Daily Traffic Volumes.

c. Level of Service.

d. Volume to Capacity.

7.0 TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

7.1 Trip Generation

The Project proposes the construction of fenced truck/trailer parking for up to nine (9) tenants/users on approximately 32.47 net acres. Each tenant/user will have a modular trailer office of 720 square feet (sf) with 3 vehicle parking spaces. A total of 871 truck/trailer parking spaces are proposed. Based on the proposed land use types, the rates for "truck parking facility" and "single-tenant office" found in the City of San Diego's *Trip Generation Manual, May 2003* were used for the proposed Project.

Table 7–1 tabulates the total Project traffic generation. The total Project is calculated to generate approximately 1,040 ADT with 157 trips (112 inbound / 45 outbound) during the AM peak hour and 166 trips (63 inbound / 103 outbound) during the PM peak hour.

TABLE 7–1
PROJECT TRIP GENERATION

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour					PM Peak Hour				
		Rate[a]	Volume	% of ADT	In:Out Split	Volume In	Volume Out	Volume Total	% of ADT	In:Out Split	Volume In	Volume Out	Volume Total
Truck Parking Facility[a]	32.47 acres	30 /acre	975	15%	70:30	103	44	147	16%	40:60	62	94	156
Single-Tenant Office[b]	6.480 KSF	10 /KSF	65	15%	90:10	9	1	10	15%	10:90	1	9	10
Total		—	**1,040**	—	—	**112**	**45**	**157**	—	—	**63**	**103**	**166**

Footnotes:

a. Rate is based on City of San Diego's Trip Generation Manual for "Truck Parking Facility." Since peak hour splits are not provided for this land use, the "warehousing" splits were used.

b. The Project proposes to construct a 720-sf modular trailer offer for each of the nine (9) tenants/users, for a total of 6,480 sf of single-tenant office space.

7.2 Trip Distribution/Assignment

Access to the site is proposed via seven (7) driveways: one (1) right-in/right-out only driveway on Cactus Road approximately 520 feet south of Airway Road, five (5) driveways including three (3) full access driveways, one (1) right-in/right-out driveway, and one (1) right-out only driveway along Airway Road between Cactus Road and Britannia Boulevard, and one (1) right-in /right-out only driveway on Britannia Boulevard approximately 450 feet south of Airway Road. Project traffic was distributed and assigned to the street system based on the driveway locations/configurations and the percentage of truck/trailer parking provided for each tenant, existing traffic patterns in the area, anticipated traffic patterns to and from the site, and the Project's proximity to state highways and arterials. ***Figure 7–1*** shows the Project traffic distribution. ***Figure 7–2*** shows the total Project traffic volumes.

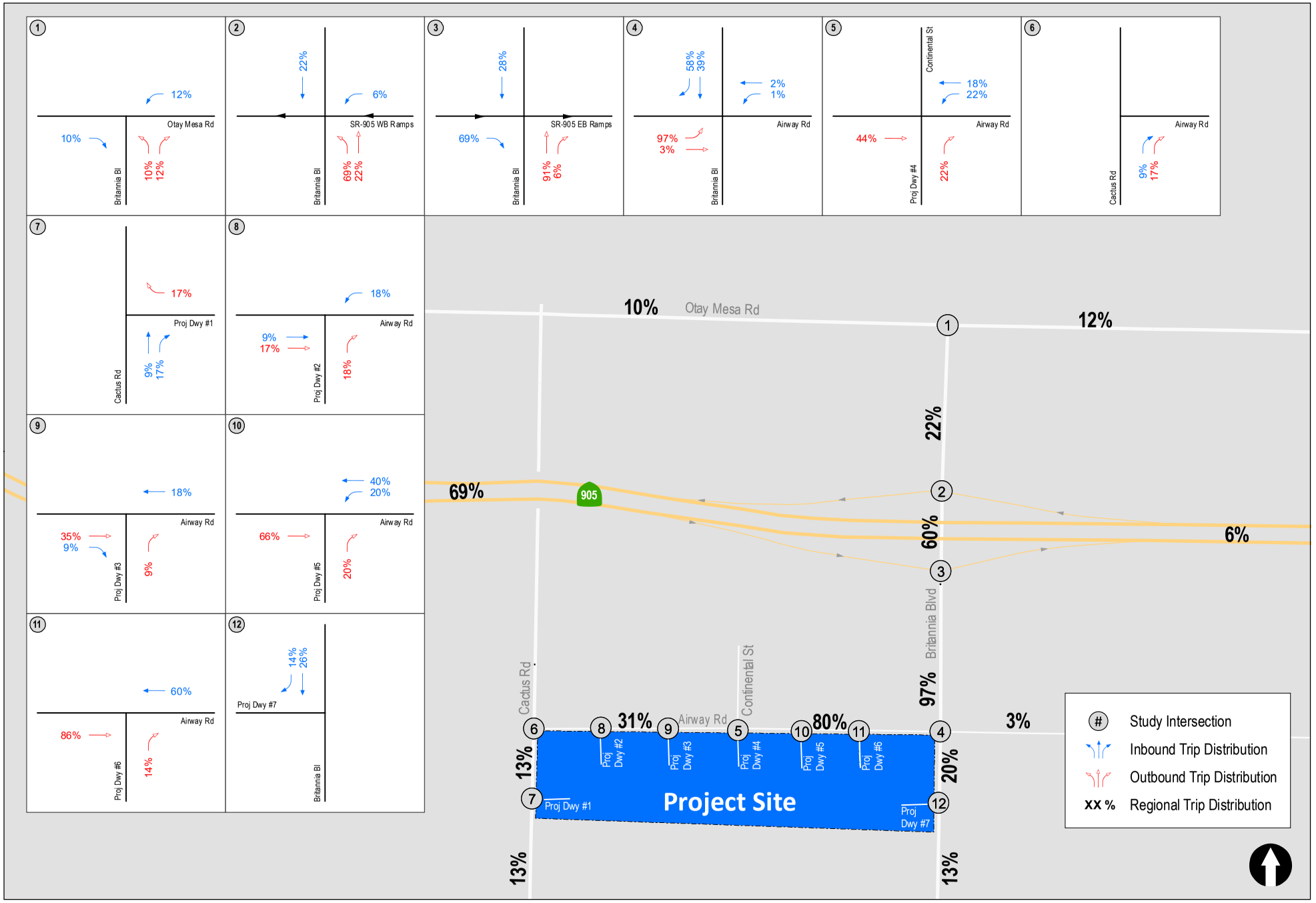

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Figure 7-1

Project Traffic Distribution

Britannia Airway Logistics Center

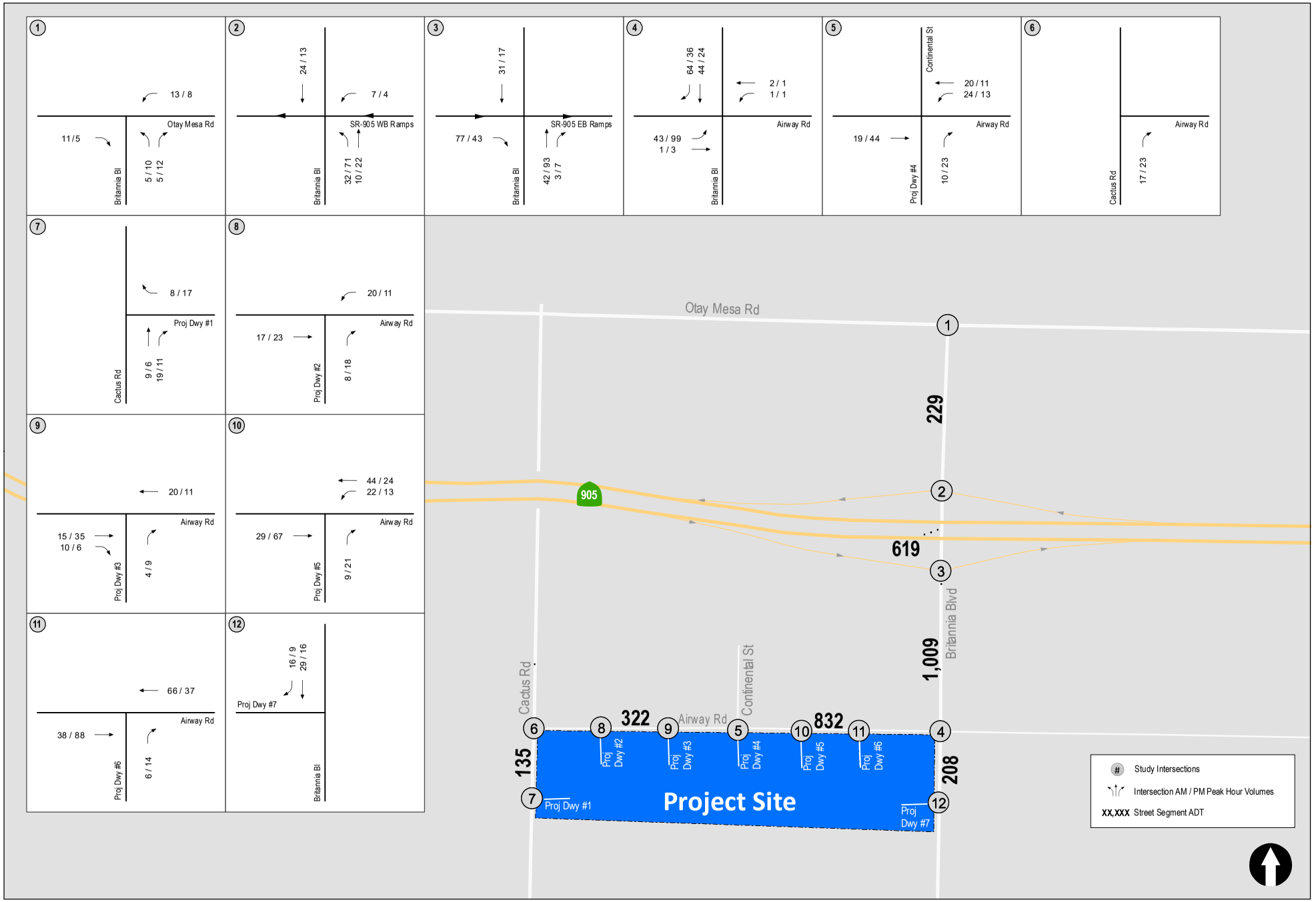

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Figure 7-2

Project Traffic Volumes

Britannia Airway Logistics Center

8.0 ANALYSIS OF EXISTING + PROJECT CONDITIONS

Project traffic was added onto existing traffic volumes to determine Existing + Project volumes. ***Figure 8–1*** shows the Existing + Project traffic volumes.

8.1 Peak Hour Intersection Levels of Service

Table 8–1 summarizes the peak hour intersection operations under the Existing + Project scenario. As seen in *Table 8–1*, with the addition of Project traffic, all study intersections are expected to operate at an acceptable LOS D or better.

Appendix E contains the Existing + Project intersection analysis worksheets.

8.2 Daily Street Segment Levels of Service

Table 8–2 summarizes the street segment operations under the Existing + Project scenario. As seen in *Table 8–2*, with the addition of Project traffic, all study segments are expected to operate at an acceptable LOS D or better except:

- Britannia Boulevard, from Airway Road to Project Driveway #7 – LOS E

Based on the City of San Diego's significance criteria, no impact is identified on the segment listed above since the Project traffic contribution does not exceed the allowable threshold.

TABLE 8–1
EXISTING + PROJECT INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project		Δ[c]	Sig?
			Delay[a]	LOS[b]	Delay	LOS		
1. Britannia Boulevard / Otay Mesa Road	Signal	AM	27.1	C	28.3	C	1.2	No
		PM	27.7	C	28.5	C	0.8	No
2. Britannia Boulevard / SR 905 WB Ramps	Signal	AM	23.2	C	23.6	C	0.4	No
		PM	28.6	C	29.3	C	0.7	No
3. Britannia Boulevard / SR 905 EB Ramps	Signal	AM	25.9	C	27.7	C	1.8	No
		PM	34.4	C	42.0	D	7.6	No
4. Britannia Boulevard / Airway Road	Signal	AM	46.2	D	49.9	D	3.7	No
		PM	29.6	C	32.8	C	3.2	No
5. Airway Road / Continental Street / Project Driveway #4	TWSC[d]	AM	10.8	B	12.2	B	1.4	No
		PM	10.1	B	11.5	B	1.4	No
6. Airway Road / Cactus Road	OWSC[e]	AM	12.2	B	12.5	B	0.3	No
		PM	10.5	B	10.7	B	0.2	No
7. Cactus Road / Project Driveway #1	OWSC[e]	AM	DNE	–	9.9	A	9.9	No
		PM	DNE	–	9.9	A	9.9	No
8. Airway Road / Project Driveway #2	OWSC[e]	AM	DNE	–	10.2	B	10.2	No
		PM	DNE	–	10.3	B	10.3	No
9. Airway Road / Project Driveway #3	OWSC[e]	AM	DNE	–	10.2	B	10.2	No
		PM	DNE	–	10.3	B	10.3	No
10. Airway Road / Project Driveway #5	OWSC[e]	AM	DNE	–	10.6	B	10.6	No
		PM	DNE	–	11.0	B	11.0	No
11. Airway Road / Project Driveway #6	OWSC[e]	AM	DNE	–	10.6	B	10.6	No
		PM	DNE	–	11.1	B	11.1	No
12. Britannia Boulevard / Project Driveway #7	OWSC[e]	AM	DNE	–	0.0	A	0.0	No
		PM	DNE	–	0.0	A	0.0	No

Footnotes:

f. Average delay expressed in seconds per vehicle.
g. Level of Service.
h. Delay increase due to the project.
i. TWSC – Two-Way Stop Controlled intersection. Worst movement delay is reported.
j. OWSC – One-Way Stop Controlled intersection. Worst movement delay is reported.

General Notes:

2. DNE – does not exist.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLD	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

TABLE 8–2
EXISTING + PROJECT STREET SEGMENT OPERATIONS

Street Segment	Functional Classification	Existing Capacity (LOS E)[a]	Existing			Existing + Project			Δ[e]	Sig?
			ADT[b]	LOS[c]	V/C[d]	ADT	LOS	V/C		
Cactus Road										
Airway Road to Project Driveway #1	2-lane Collector	8,000	1,320	A	0.165	1,455	A	0.182	0.017	No
Britannia Boulevard										
Otay Mesa Road to SR 905 WB Ramps	6-lane Prime Arterial	60,000	13,400	A	0.223	13,629	A	0.227	0.004	No
SR 905 WB Ramps to SR 905 EB Ramps	6-lane Prime Arterial	60,000	24,510	A	0.409	25,129	B	0.419	0.010	No
SR 905 EB Ramps to Airway Road	5-lane Prime Arterial	50,000	39,200	C	0.784	40,209	D	0.804	0.020	No
Airway Road to Project Driveway #7	3-lane Major Arterial	30,000	27,050	E	0.902	27,258	E	0.909	0.007	No
Airway Road										
Cactus Road to Continental Street	2-Lane Collector	8,000	1,880	A	0.235	2,202	A	0.275	0.040	No
Continental Street to Britannia Boulevard	3-Lane Collector	15,000	2,670	A	0.178	3,502	A	0.233	0.055	No

Footnotes:

a. Capacities based on City of San Diego's Roadway Classification & LOS table (*See Appendix C*).
b. Average Daily Traffic
c. Level of Service
d. Volume to Capacity ratio
e. Δ denotes a project-induced increase in the Volume to Capacity ratio

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Figure 8-1

Existing + Project Traffic Volumes

Britannia Airway Logistics Center

9.0 CUMULATIVE PROJECTS

Cumulative projects represent reasonably foreseeable planned development that contributes to background traffic conditions for the Near-Term (Opening Year 2023) scenarios. LLG researched ongoing cumulative project development in the study area that were recently approved or projects that are currently under review. A total of 22 cumulative projects were identified for consideration in the Near-Term (Opening Year 2023) scenarios.

Table 9–1 contains a list of cumulative projects that were considered in the Near-Term (Opening Year 2023) analysis. ***Figure 9–1*** shows the locations of the cumulative projects. ***Figure 9–2*** shows the cumulative projects traffic volumes. ***Appendix F*** contains additional information regarding the cumulative projects.

TABLE 9–1
CUMULATIVE PROJECTS

Project Name	Land Use	Estimated ADT [a]	AM Peak Hour (In/Out) [a]	PM Peak Hour (In/Out) [a]	Status
1. 7-Eleven (PTS 540084)	Convenience Store (2,940 sf)	1,800	144 (72 / 72)	144 (72 / 72)	Closed, but permit was not issued [b]
2. Azul Playa Del Sol/Luna (California Terraces PA 61)	Residential (740 multi-family units)	4,440	356 (71 / 285)	400 (280 / 120)	Approved [c]
3. Cesar Solis Park	Park (15 acres)	750	30 (0 / 30)	60 (0 / 60)	Constructed and Open [c]
4. Candlelight (PTS #691625)	Residential (475 units)	3,600	288 (58 / 230)	360 (252 / 108)	Under Review
5. Southview (PTS #370044)	Residential (277 units)	1,662	133 (27 / 106)	299 (105 / 194)	Constructed and Open [c]
6. Southview East (PTS #371807)	Residential (136 units)	816	65 (13 / 51)	220 (51 / 169)	Under construction [c]
7. Southwind (PTS 412529)	Residential (100 units)	800	64 (13 / 51)	80 (56 / 24)	Closed, but permit was not issued [b]
8. BDM Mixed-Use (Handler) (PTS #673818)	Residential (430 units)	2,580	207 (46 / 169)	233 (163 / 70)	Under review
	Commercial (6,000 sf)	240	8 (5 / 3)	22 (11 / 11)	
9. Arco #5770 (PTS 110390)	Gas Station (2 additional fuel dispensers)	60	4 (2 / 2)	4 (2 / 2)	Constructed and Open [c]
10. Marijuana Production Facility (PTS 585510)	Marijuana Facility (86,400 sf)	346	69 (62 / 7)	69 (14 / 55)	Approved
11. California Terraces PA 61 (PTS #690358)	Residential (282 units)	1,850	147 (29 / 118)	173 (121 / 51)	Approved [d]
12. Cross Border Facility (Phase 2) [e]	Cross Border Facility (45,000 sf of border facility, 170 rooms of hotel, 12 fuel dispenser gas station, 20,000 sf of retail)	24,700	1,056 (606 / 450)	1,167 (587 / 580)	Approved
13. Metro Airpark (Phase 1)	Airport / Retail (163 additional flights, 18,880 sf of commercial uses, and 1,500 sf of restaurant)	1,000	99 (77 / 22)	106 (34 / 72)	Approved

TABLE 9–1
CUMULATIVE PROJECTS

Project Name	Land Use	Estimated ADT [a]	AM Peak Hour (In/Out) [a]	PM Peak Hour (In/Out) [a]	Status
14. La Media Retail (PTS #334235)	Commercial / Retail (106,700 sf of retail, 13,500 sf of drugstore, 6,000 sf of restaurant, and 12 fuel dispenser gas station.	8,660	310 (183 / 127)	812 (407 / 405)	Approved
15. Sunroad Otay Mesa (Phase 1 and Phase 2) (PTS #538140)	Warehouse (845,100 sf)	4,225	633 (444 / 189)	676 (270 / 406)	Approved, constructed, and occupied by 4/22/2022
16. Lumina (Phase 1) (PTS #555609) [f]	Mixed Use Residential / Commercial (1,129 multi-family units and 62,530 sf of commercial use)	11,151	673 (187 / 486)	1,048 (646 / 402)	Approved
17. Lumina (Phase 2) (PTS #555609)[f]	Mixed Use Residential / Commercial (739 multi-family units, 6.3 acres of school use, and 6.6 acres of park use)	15,181	1,214 (390 / 824)	1,532 (944 / 588)	Approved
18. Otay 250 (East Otay Mesa Specific Plan Amendment) [g]	Mixed Use Residential / Commercial (3,158 units, 47.7 acres of technology park use, 6.8 acres of shopping center, and 1.0 acre of specialty retail use)	34,124	2,785 (1,090 / 1,695)	3,474 (2,000 / 1,474)	Under Construction
19. Airway Logistics Center [h] (PTS # 665589)	Warehousing / Office (235,480 sf of warehouse and 12,000 sf of office)	1,518	222 (165 / 57)	237 (86 / 151)	Under Construction
20. Sanyo Logistics Center [i] (PTS #668005)	Warehousing / Office (232,969 sf of warehouse and 10,000 sf of office)	1,462	214 (158 / 56)	229 (83 / 146)	Under Construction

TABLE 9–1
CUMULATIVE PROJECTS

Project Name	Land Use	Estimated ADT [a]	AM Peak Hour (In/Out) [a]	PM Peak Hour (In/Out) [a]	Status
21. Airway Gardens (PTS 668987)	Residential (454 units)	2,724	218 (44 / 174)	246 (172 / 74)	Under Construction
22. Otay Truck Park (PTS #603927)	Truck Storage Facility and Auto Parking (1,050 spaces)	2,142	193 (89 / 104)	198 (84 /113)	Under Review

Footnotes:

a. Trip generation obtained from *Otay Mesa Lumina TIS*, February 20, 2019

b. Per PTS/Open DSD, the project was closed out but a permit was not issued. However, to be conservative, the project was included in the near-term analysis.

c. Based on research, the status of the project's construction phase and occupancy during the time of existing counts is not known. To be conservative, the entire project was included in the near-term analysis.

d. Although the current project has been reduced, to be conservative, the previously forecasted trip generation of 4,716 ADT was considered in this analysis.

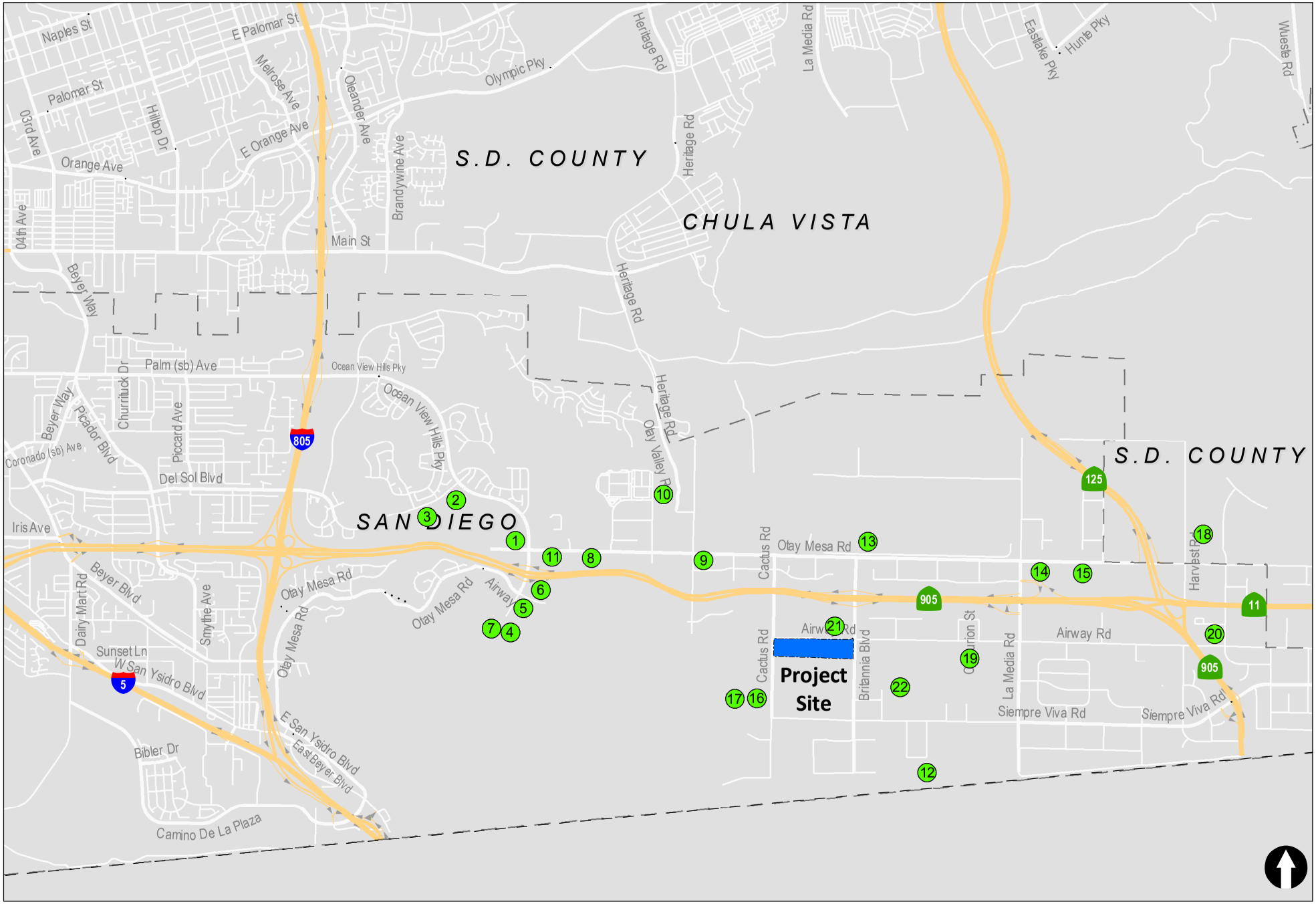
e. Phase 2 of the Cross Border Facility Project is not expected to be completed until the Year 2024. Therefore, this project is not expected to generate additional trips to the study area prior to the Proposed Project's Opening Day by Year 2023.

f. Phase 1 and 2 of the Lumina Project is not expected to be completed until the Year 2024 (Phase 1) and Year 2027 (Phase 2). Therefore, this project is not expected to generate additional trips to the study area prior to the Proposed Project's Opening Day by Year 2023.

g. Otay 250 project expected opening day is Year 2024. Therefore, this project is not expected to generate additional trips to the study area prior to the Proposed Project's Opening Day by Year 2023.

h. Trip generation obtained from *Airway Logistic Center Access Analysis*, October 2020.

i. Trip generation obtained from *Sanyo Logistic Center Access Analysis*, May 2021.



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LINSCOTT LAW & GREENSPAN engineers

Figure 9-1

Cumulative Projects Location Map

Britannia Airway Logistics Center

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Figure 9-2

Cumulative Projects Traffic Volumes

Britannia Airway Logistics Center

10.0 ANALYSIS OF NEAR-TERM (OPENING YEAR 2023) CONDITIONS

10.1 Near-Term Network Assumptions

No changes to the street network or intersection geometry from existing conditions were assumed for the analysis of this scenario.

10.2 Near-Term Traffic Volumes

Near-Term (Opening Year 2023) traffic volumes were calculated for the study area by adding the total cumulative projects traffic volumes shown on *Figure 9–2* onto the existing traffic volumes.

Figure 10–1 shows the Near-Term (Opening Year 2023) traffic volumes.

10.3 Near-Term (Opening Year 2023) Analysis

10.3.1 *Peak Hour Intersection Levels of Service*

Table 10–1 summarizes the peak hour intersection operations under the Near-Term (Opening Year 2023) conditions. As seen in *Table 10–1*, all study intersections are expected to operate at an acceptable LOS D or better.

Appendix G contains the Near-Term (Opening Year 2023) intersection analysis worksheets.

10.3.2 *Daily Street Segment Levels of Service*

Table 10–2 summarizes the street segment operations under the Near-Term (Opening Year 2023) conditions. As seen in *Table 10–2*, all study segments are expected to operate at an acceptable LOS B or better except:

- Britannia Boulevard, from SR 905 EB Ramps to Airway Road – LOS E
- Britannia Boulevard, from Airway Road to Project Driveway #7 – LOS E

10.4 Near-Term (Opening Year 2023) + Project Analysis

Near-Term (Opening Year 2023) + Project traffic volumes were calculated by adding the Project traffic volumes to the Near-Term (Opening Year 2023) traffic volumes. ***Figure 10–2*** shows the Near-Term (Opening Year 2023) + Project traffic volumes.

10.4.1 *Peak Hour Intersection Levels of Service*

Table 10–1 summarizes the peak hour intersection operations under the Near-Term (Opening Year 2023) + Project conditions. As seen in *Table 10–1*, with the addition of Project traffic, all study intersections are expected to operate at an acceptable LOS D or better.

Appendix H contains the Near-Term (Opening Year 2023) + Project intersection analysis worksheets.

10.4.2 *Daily Street Segment Levels of Service*

Table 10–2 summarizes the street segment operations under the Near-Term (Opening Year 2023) + Project conditions. As seen in *Table 10–2*, with the addition of Project traffic, all study segments are expected to operate at an acceptable LOS B or better except:

- Britannia Boulevard, from SR 905 EB Ramps to Airway Road – LOS E
- Britannia Boulevard, from Airway Road to Project Driveway #7 – LOS E

Based on the City of San Diego's significance criteria, no impacts are identified on the segments listed above since the Project traffic contribution does not exceed the allowable threshold.

TABLE 10–1
NEAR-TERM (OPENING YEAR 2023) INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Near-Term (Opening Year 2023)		Near-Term (Opening Year 2023) + Project		Δ[c]	Sig?
			Delay[a]	LOS[b]	Delay	LOS		
1. Britannia Boulevard / Otay Mesa Road	Signal	AM	27.6	C	28.7	C	1.1	No
		PM	28.6	C	29.4	C	0.8	No
2. Britannia Boulevard / SR 905 WB Ramps	Signal	AM	23.7	C	23.9	C	0.2	No
		PM	29.2	C	29.9	C	0.7	No
3. Britannia Boulevard / SR 905 EB Ramps	Signal	AM	30.9	C	35.2	D	4.3	No
		PM	39.5	D	49.1	D	9.6	No
4. Britannia Boulevard / Airway Road	Signal	AM	47.5	D	54.4	D	6.9	No
		PM	42.9	D	51.7	D	8.8	No
5. Airway Road / Continental Street / Project Driveway #4	TWSC[d]	AM	17.0	C	24.8	C	7.8	No
		PM	12.1	B	14.9	B	2.8	No
6. Airway Road / Cactus Road	OWSC[e]	AM	12.2	B	12.5	B	0.3	No
		PM	10.6	B	10.7	B	0.1	No
7. Cactus Road / Project Driveway #1	OWSC[e]	AM	DNE	–	9.9	A	9.9	No
		PM	DNE	–	9.9	A	9.9	No
8. Airway Road / Project Driveway #2	OWSC[e]	AM	DNE	–	10.2	B	10.2	No
		PM	DNE	–	10.4	B	10.4	No
9. Airway Road / Project Driveway #3	OWSC[e]	AM	DNE	–	10.2	B	10.2	No
		PM	DNE	–	10.4	B	10.4	No
10. Airway Road / Project Driveway #5	OWSC[e]	AM	DNE	–	12.6	B	12.6	No
		PM	DNE	–	12.0	B	12.0	No
11. Airway Road / Project Driveway #6	OWSC[e]	AM	DNE	–	12.7	B	12.7	No
		PM	DNE	–	12.2	B	12.2	No
12. Britannia Boulevard / Project Driveway #7	OWSC[e]	AM	DNE	–	0.0	A	0.0	No
		PM	DNE	–	0.0	A	0.0	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Delay increase due to the project.
d. TWSC – Two-Way Stop Controlled intersection. Worst movement delay is reported.
e. OWSC – One-Way Stop Controlled intersection. Worst movement delay is reported.

General Notes:

1. DNE – does not exist.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

TABLE 10–2
NEAR-TERM (OPENING YEAR 2023) STREET SEGMENT OPERATIONS

Street Segment	Functional Classification	Existing Capacity (LOS E)[a]	Near-Term (Opening Year 2023)			Near-Term (Opening Year 2023) + Project			Δ[e]	Sig?
			ADT[b]	LOS[c]	V/C[d]	ADT	LOS	V/C		
Cactus Road										
Airway Road to Project Driveway #1	2-lane Collector	8,000	1,350	A	0.169	1,485	A	0.186	0.017	No
Britannia Boulevard										
Otay Mesa Road to SR 905 WB Ramps	6-lane Prime Arterial	60,000	16,295	A	0.272	16,524	A	0.275	0.003	No
SR 905 WB Ramps to SR 905 EB Ramps	6-lane Prime Arterial	60,000	33,041	B	0.551	33,660	B	0.561	0.010	No
SR 905 EB Ramps to Airway Road	5-lane Prime Arterial	50,000	45,008	E	0.900	46,017	E	0.920	0.020	No
Airway Road to Project Driveway #7	3-lane Major Arterial	30,000	29,218	E	0.974	29,426	E	0.981	0.007	No
Airway Road										
Cactus Road to Continental Street	2-Lane Collector	8,000	2,053	A	0.257	2,375	A	0.297	0.040	No
Continental Street to Britannia Boulevard	3-Lane Collector	15,000	5,567	B	0.371	6,399	B	0.427	0.056	No

Footnotes:

a. Capacities based on City of San Diego's Roadway Classification & LOS table (*See Appendix C*).
b. Average Daily Traffic
c. Level of Service
d. Volume to Capacity ratio
e. Δ denotes a project-induced increase in the Volume to Capacity ratio

LINSCOTT LAW & GREENSPAN engineers

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Figure10-1

Near-Term (Opening Year 2023) Traffic Volumes

Britannia Airway Logistics Center

LINSCOTT LAW & GREENSPAN engineers

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Figure 10-2

Near-Term (Opening Year 2023) + Project Traffic Volumes

Britannia Airway Logistics Center

11.0 ACCESS AND ACTIVE TRANSPORTATION

11.1 Access

The Project proposes access to the site via Airway Road, Cactus Road, and Britannia Boulevard. On Airway Road, a total of five (5) driveways are proposed to facilitate independent access to the truck parking tenants. On Airway Road, between Continental Street and Britannia Boulevard, three (3) driveways are proposed – a full access driveway (serving tenants 5 and 6) as the south leg of Continental Street, a full access driveway east of Continental Street (serving tenants 7 and 8) and a right-out only driveway (west of Britannia Boulevard, serving tenant 9). On Airway Road between Cactus Road and Continental Street, two driveways are proposed – a full access driveway (east of Cactus Road, serving tenants 2 and 3) is proposed and a driveway (west of Continental Street, serving tenant 4) is proposed to allow right-in / right-out movements only.

One (1) driveway (serving tenant 9) is proposed on Britannia Boulevard, which would allow right-in/right-out movements only. One (1) driveway (serving tenant 1) is proposed on Cactus Road, which would allow right-in/right-out movements only.

The Project proposes gates at all the driveways. These gates will remain open during business hours to ensure that trucks entering the Project site would not queue into the public ROW.

11.2 Frontage Improvements

Consistent with the Airway Road ultimate classification of a 6-lane Major, per the City of San Diego Street Design Manual, the Project is proposing to widen Airway Road and construct a raised median along the Project frontage to provide half-width improvements to include a 54’ centerline-to-curb width and a 27’ parkway. This 27’ parkway width would include a 8.5’ landscape buffer, 2’ buffer, 8’ Class I bike path, 2’ buffer and a 6’ non-contiguous sidewalk, consistent with the Central Village Specific Plan approved by City Council on April 4, 2017 with the exception of 8’ Class bike path (vs. 10’ Class I bike path in the Central Village Specific Plan), which is required in order to provide a cross section consistent with City of San Diego Green Street standards.

Consistent with the Britannia Boulevard ultimate classification of a 6-lane Major, per the City of San Diego Street Design Manual, the Project is proposing to widen Britannia Boulevard along the Project frontage to provide half-width improvements to include a 75’ centerline-to-curb width and a 20’ parkway. This 20’ parkway width would provide accommodation for a 14’ landscape buffer and a 6’ non-contiguous sidewalk.

Consistent with the Cactus Road ultimate classification of a 4-lane Major, per the City of San Diego Street Design Manual, the Project is proposing to widen Cactus Road and construct a raised median along the Project frontage to provide half-width improvements to include a 60’-76’ centerline-to-curb width and a 22’ parkway. This 22’ parkway width would provide accommodation for a 16’ landscape buffer and a 6’ non-contiguous sidewalk.

Appendix I includes conceptual plans of the proposed Project frontage improvements.

11.3 Queuing Analysis

Vehicular queuing was evaluated using SimTraffic 11 for the westbound left-turning lanes at the proposed Project driveways (i.e., Driveways #2, #4, and #5) along Airway Road where left-turn pockets are proposed. ***Table 11–1*** shows the 95th percentile queues are based on 60-minute recording time, 15-minute seed, and an average of 10 simulations. Based on the queue analysis, the westbound left-turning queues at Driveways #2, #4, and #5 are expected to be contained with the proposed storage length. Therefore, no queuing issues are identified.

TABLE 11–1
DRIVEWAY QUEUE ANALYSIS

Intersection	Movement	Peak Hour	Existing + Project		Near-Term (Opening Year 2023) + Project	
			Proposed Storage	Queue Length	Proposed Storage	Queue Length
5. Airway Road / Continental Street / Project Driveway #4	WBL	AM	175	37’	175’	38’
		PM		27’		27’
9. Airway Road / Project Driveway #2	WBL	AM	185’	28’	185’	37’
		PM		27’		20’
11. Airway Road / Project Driveway #5	WBL	AM	197’	39’	197’	54’
		PM		29’		31’

General Notes:

1. 95th percentile queues reported.
2. Vehicular (including heavy vehicles) queuing was evaluated using SimTraffic 11 based on 60-minute recording time and 15-min seeding on average of 10 simulations.

Table 11–2 shows the Near-Term (Opening Year 2023) + Project operations for streets segments fronting the Project site with the Project frontage improvements. As seen in *Table 11–2*, the street segments fronting the Project site are expected to operate at LOS C or better with the Project frontage improvements.

TABLE 11–2
NEAR-TERM (OPENING YEAR 2023) + PROJECT STREET SEGMENT OPERATIONS WITH FRONTAGE IMPROVEMENTS

Street Segment	Functional Classification	Existing Capacity (LOS E)[a]	Near-Term + Project		Future Classification	Future Capacity (LOS E)[a]	Near-Term + Project	
			ADT[b]	LOS[c]			ADT	LOS
Cactus Road								
Airway Road to Project Driveway #1	2-lane Collector	8,000	1,350	A	3-lane Major Arterial	30,000	1,350	A
Britannia Boulevard								
Airway Road to Project Driveway #7	3-lane Major Arterial	30,000	29,426	E	4-lane Major Arterial	40,000	29,426	C
Airway Road								
Cactus Road to Continental Street	2-lane Collector	8,000	2,053	A	4-lane Major Arterial	40,000	2,053	A
Continental Street to Britannia Boulevard	3-lane Collector	15,000	5,567	B	4-lane Major Arterial	40,000	5,567	A

Footnotes:
a. Capacities based on City of San Diego's Roadway Classification & LOS table (*See Appendix C*).
b. Average Daily Traffic
c. Level of Service

11.4 Signal Warrant Analysis

A peak hour signal warrant (Warrant 3: Peak Hour) analysis was conducted at the Airway Road / Continental Street intersection under the Near-Term + Project (Opening Year 2023) conditions. Based on the analysis, it is concluded that the peak hour signal warrant would not be met at this intersection under Near-Term + Project (Opening Year 2023) conditions. ***Appendix J*** includes the peak hour signal warrant analysis worksheets.

11.5 Pedestrian, Bicycle and Transit Mobility

Along Airway Road between Continental Street and Britannia Boulevard, a contiguous sidewalk currently exists on the north side. Along the Project frontage, there are no sidewalks on the south side of Airway Road, on Britannia Boulevard or on Cactus Road.

As a part of the Project frontage improvements, per the current Street Design Manual, the Project will provide half-width improvements to meet the ultimate classification of a 6-lane Major on Airway Road and Britannia Boulevard. In addition, the Project will provide half-width improvements to meet the ultimate classification of 4-lane Major on Cactus Road. These improvements would include a 6' non-contiguous sidewalk along the full Project frontages on Airway Road, Britannia Boulevard, and Cactus Road.

There are no bicycle facilities currently provided along Airway Road and Cactus Road. Class II bike lanes are provided on both sides of Britannia Boulevard between Otay Mesa Road and Airway Road.

However, bike lanes are not provided on Britannia Boulevard along the project frontage. As a part of the project frontage requirements, the Project will install a Class II buffered bike lane and Class I bike path on Airway Road. In addition, the Project will provide Class II buffered bike lanes on Cactus Road and Britannia Boulevard as a part of the frontage improvements.

There are two (2) existing bus stops located within ¼ mile walking distance from the Project site, which are described below:

- Eastbound and westbound bus stops for MTS Route 909 are located on Airway Road on the east side of Britannia Boulevard (approximately 500 feet east of Britannia Boulevard. Route 909 provides service between Southwestern Higher Education Center Otay Mesa and the Otay Mesa Transit Center. Weekday service begins at 5:05 AM with 1-hour headways and ends at 7:46 PM.

12.0 PARKING

The section below discusses the City of San Diego parking requirements for the proposed Project.

12.1 Automobile Parking Requirements

According to Table 142.05E in the *San Diego Municipal Code, Chapter 14: General Regulation, Article 2: General Development Regulation, Division 5: Parking Regulations*, a minimum of 3.3 parking spaces per 1,000 square feet is required for office uses. Based on the above minimum parking requirements, the Project required parking is calculated as 22 spaces. The Project proposes to provide 27 parking spaces, thereby exceeding the City's minimum requirement.

The City's minimum required parking for accessible parking spaces is provided on SDM-117 of the City of San Diego's Standard Drawings (1/31/2012). According to SDM-117 of the City of San Diego's Standard Drawings, 2 accessible parking spaces are required for projects that provide 26 to 50 parking spaces. The Project proposes to provide one (1) accessible parking space per tenant, which equates to a total of nine (9) accessible parking spaces, thereby exceeding the City's minimum requirement.

12.2 Motorcycle Parking Requirements

The City of San Diego requires that motorcycle parking be provided at a ratio of 2% of the total automobile parking required, or two spaces, whichever is greater. Based on the City's parking requirements, a minimum of two (2) motorcycle parking spaces are required. The Project will provide a total of two (2) motorcycle parking spaces, therefore meeting the City's minimum parking requirements.

12.3 Bicycle Parking Requirements

Per Municipal Code Section 142.0530(e)(1)(A), Industrial uses are exempt from providing short-term bicycle parking spaces.

Per Section 142.0530(e)(2)(A), the Project would be required to provide two (2) long-term bicycle parking spaces (5% of required vehicle parking). The Project would provide three (3) long-term bicycle parking spaces, thereby exceeding the City's minimum requirement.

12.4 Carpool, Electric Vehicles (EV's) and Zero Emission Vehicles Parking Requirements

The City requires that three (3) carpool and zero emission vehicle parking be provided for projects that provide 26 to 50 parking spaces. The Project will provide a total of four (4) carpool and zero emission parking spaces, therefore exceeding the City's minimum parking requirements.

13.0 COMPLETE COMMUNITIES: MOBILITY CHOICES

In November 2020, the City of San Diego adopted the Complete Communities: Housing Solutions and Mobility Choices Program. Complete Communities includes planning strategies that work together to create incentives to build homes near transit, provide more mobility choices and enhance opportunities for places to walk, bike, relax and play. These efforts ensure that all residents have access to the resources and opportunities necessary to improve the quality of their lives.

The purpose of the Mobility Choices Regulations is to reduce Citywide vehicle miles traveled (VMT) to address the environmental impacts of development related to noise, air pollution, and greenhouse gas emissions, and to promote public health and enjoyment, by investing in active transportation infrastructure and amenities that will result in the greatest reductions to Citywide VMT.

The San Diego Municipal Code (SDMC) Ordinance Number O-21274, adopted on December 9, 2020, provides the development regulations for the Mobility Choices portion of the Complete Communities program. According to the ordinance, the Project is located in Mobility Zone 2. Mobility Zone 2 means any premises located either partially or entirely within a Transit Priority Area (TPA).

SDMC Section 143.1103(b) indicates the requirement for the application of VMT Reduction Measures for all development located within Mobility Zone 2 in accordance with the Land Development Manual Appendix T. The City of San Diego's Land Development Manual Appendix T provides a list of VMT Reduction Measures that are split into a series of categories, which include Pedestrian Measures, Bicycle Supportive Measures, Transit Supportive Measures, and Other Measures. Each of the individual measures is given an assigned point value per unit of measure. For development in Mobility Zone 2, SDMC Section 143.1103(b)(1) identifies the requirement to provide VMT Reduction Measures totaling at least 5 points. The Project will provide measures as required by the ordinance that add up to at least 5 points as identified in the City of San Diego's Land Development Manual Appendix T. The Project will provide at least 5 points through the following measures shown in ***Table 13–1***.

TABLE 13–1
MOBILITY CHOICES VMT REDUCTION MEASURES

Category	Measures	Points
Bicycle Supportive Measures	The Project will install new bicycle infrastructure on Airway Road along the project frontage, which will include a Class II buffered bike lane and a Class I bike path.	3
	The Project will provide three (3) long-term bicycle parking spaces, which is more than 10% beyond the minimum requirement.	2.5

14.0 SIGNIFICANCE OF IMPACTS AND MITIGATION MEASURES

14.1 Significance of Impacts

Per the City's significance thresholds and the analysis methodology presented in this report, no significant impacts were determined within the study area. Therefore, mitigation measures are not necessary.

LINSCOTT
LAW &
GREENSPAN
engineers

TECHNICAL APPENDICES TO THE ACCESS ANALYSIS
BRITANNIA AIRWAY LOGISTICS CENTER

City of San Diego, California
January 2023
PRJ 1048583

LLG Ref. 3-21-3491

Linscott, Law & Greenspan, Engineers
4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
858.300.8810 F
www.llgengineers.com

APPENDICES

APPENDIX	
A.	Intersection and Segment Manual Count Sheets and City of San Diego Signal Timing Sheets
B.	Intersection Methodology and Analysis Sheets
C.	City of San Diego Roadway Classification Table
D.	Existing Intersection Level of Service Worksheets
E.	Existing + Project Intersection Level of Service Worksheets
F.	Cumulative Projects Information
G.	Near-Term (Opening Year 2023) Intersection Level of Service Worksheets
H.	Near-Term (Opening Year 2023) + Project Intersection Level of Service Worksheets
I.	Frontage Improvements Conceptual Plans
J.	Airway Road / Continental Street Peak Hour Signal Warrant Analysis Sheet

APPENDIX A

INTERSECTION AND SEGMENT MANUAL COUNT SHEETS AND CITY OF SAN DIEGO SIGNAL TIMING SHEETS

Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#01	File Name:	ITM-22-030-01
Intersection:	Britannia Boulevard & Otay Mesa Road	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics

AM	- Southbound			Otay Mesa Road Westbound			Britannia Boulevard Northbound			Otay Mesa Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	0	0	21	21	0	34	0	48	0	29	20	173
7:15	0	0	0	39	19	0	28	0	40	0	41	33	200
7:30	0	0	0	30	45	0	39	0	60	1	53	23	251
7:45	0	0	0	36	38	0	35	0	70	0	56	44	279
8:00	0	0	0	35	49	0	49	0	45	0	45	36	259
8:15	0	0	0	44	35	0	45	0	46	0	55	26	251
8:30	0	0	0	48	47	0	43	0	55	1	46	51	291
8:45	0	0	0	44	43	0	46	0	46	0	58	52	289
Total	0	0	0	297	297	0	319	0	410	2	383	285	1993
Approach%	-	-	-	50.0	50.0	-	43.8	-	56.2	0.3	57.2	42.5	
Total%	-	-	-	14.9	14.9	-	16.0	-	20.6	0.1	19.2	14.3	

AM Intersection Peak Hour: **08:00 to 09:00**

Volume	-	-	-	171	174	-	183	-	192	1	204	165	1,090
Approach%	-	-	-	49.6	50.4	-	48.8	-	51.2	0.3	55.1	44.6	
Total%	-	-	-	15.7	16.0	-	16.8	-	17.6	0.1	18.7	15.1	
PHF			#DIV/0!			0.91			0.96			0.84	0.94

PM	- Southbound			Otay Mesa Road Westbound			Britannia Boulevard Northbound			Otay Mesa Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	0	0	54	71	0	46	0	50	1	67	67	356
16:15	0	0	0	35	59	0	54	0	34	0	45	55	282
16:30	0	0	0	73	70	0	45	0	33	0	59	54	334
16:45	0	0	0	38	59	0	47	0	32	8	60	45	289
17:00	0	0	0	71	73	0	42	0	28	0	69	83	366
17:15	0	0	0	46	57	0	35	0	21	1	59	53	272
17:30	0	0	0	53	61	0	36	0	25	1	39	45	260
17:45	0	0	0	22	49	0	30	0	18	0	62	32	213
Total	0	0	0	392	499	0	335	0	241	11	460	434	2372
Approach%	-	-	-	44.0	56.0	-	58.2	-	41.8	1.2	50.8	48.0	
Total%	-	-	-	16.5	21.0	-	14.1	-	10.2	0.5	19.4	18.3	

PM Intersection Peak Hour: **16:15 to 17:15**

Volume	-	-	-	217	261	-	188	-	127	8	233	237	1,271
Approach%	-	-	-	45.4	54.6	-	59.7	-	40.3	1.7	48.7	49.6	
Total%	-	-	-	17.1	20.5	-	14.8	-	10.0	0.6	18.3	18.6	
PHF			#DIV/0!			0.83			0.89			0.79	0.87

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

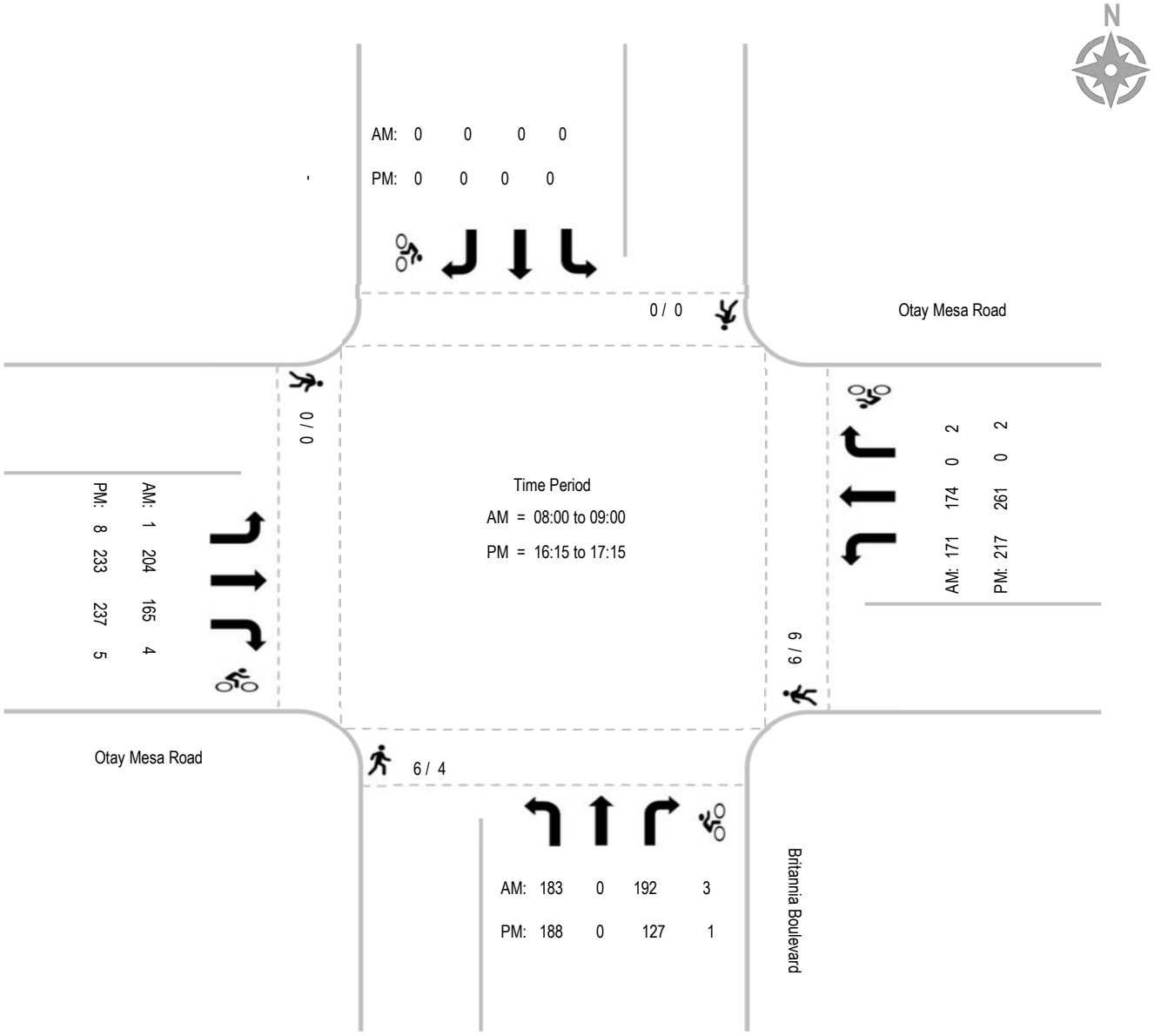
Location:	#01	File Name:	ITM-22-030-01
Intersection:	Britannia Boulevard & Otay Mesa Road	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics

AM	- Southbound				Otay Mesa Road Westbound				Britannia Boulevard Northbound				Otay Mesa Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	4	1
7:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	1	2
7:30	0	0	0	0	0	0	0	0	3	1	0	0	0	1	0	0	3	2
7:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
8:00	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	2	1
8:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
8:30	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				6				6				0				12	
Bike Total		0	0	0		0	2	0		2	0	1		1	3	0		9

PM	- Southbound				Otay Mesa Road Westbound				Britannia Boulevard Northbound				Otay Mesa Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	4	0
16:30	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
17:00	0	0	0	0	2	0	0	0	1	0	0	0	0	0	2	0	3	2
17:15	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	2	1
17:30	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	2	1
17:45	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Ped Total	0				9				4				0				13	
Bike Total		0	0	0		0	2	0		1	0	0		0	4	1		8

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location: #01	File Name:	ITM-22-030-01
	Intersection: Britannia Boulevard & Otay Mesa Road	Project:	LLG Ref. 3-21-3491
	Date of Count: Thursday, April 21, 2022		Britannia Airway Logistics



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#02	File Name:	ITM-22-030-02
Intersection:	Britannia Boulevard & SR-905 WB Ramps	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics

AM	Britannia Boulevard Southbound			SR-905 WB Off Ramp Westbound			Britannia Boulevard Northbound			SR-905 WB On Ramp Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	33	11	48	0	21	66	58	0	0	0	0	237
7:15	0	60	10	42	2	18	45	50	0	0	0	0	227
7:30	0	42	14	49	0	31	61	73	0	0	0	0	270
7:45	0	53	14	48	0	26	50	80	0	0	0	0	271
8:00	0	66	18	56	0	21	67	70	0	0	0	0	298
8:15	0	48	6	44	1	26	61	56	0	0	0	0	242
8:30	0	69	25	52	0	39	73	70	0	0	0	0	328
8:45	0	74	21	59	0	16	71	75	0	0	0	0	316
Total	0	445	119	398	3	198	494	532	0	0	0	0	2189
Approach%	-	78.9	21.1	66.4	0.5	33.1	48.1	51.9	-	-	-	-	
Total%	-	20.3	5.4	18.2	0.1	9.0	22.6	24.3	-	-	-	-	

AM Intersection Peak Hour: **08:00 to 09:00**

Volume	-	257	70	211	1	102	272	271	-	-	-	-	1,184
Approach%	-	78.6	21.4	67.2	0.3	32.5	50.1	49.9	-	-	-	-	
Total%	-	21.7	5.9	17.8	0.1	8.6	23.0	22.9	-	-	-	-	
PHF			0.86			0.86			0.93			#DIV/0!	0.90

PM	Britannia Boulevard Southbound			SR-905 WB Off Ramp Westbound			Britannia Boulevard Northbound			SR-905 WB On Ramp Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	84	26	45	0	19	176	70	0	0	0	0	420
16:15	0	68	28	50	0	24	157	66	0	0	0	0	393
16:30	0	61	63	37	0	17	148	52	0	0	0	0	378
16:45	0	51	41	40	0	26	151	49	0	0	0	0	358
17:00	0	70	60	41	0	19	131	50	0	0	0	0	371
17:15	0	56	36	39	0	16	145	47	0	0	0	0	339
17:30	0	48	34	43	0	22	115	48	0	0	0	0	310
17:45	0	35	20	27	0	15	89	32	0	0	0	0	218
Total	0	473	308	322	0	158	1112	414	0	0	0	0	2787
Approach%	-	60.6	39.4	67.1	-	32.9	72.9	27.1	-	-	-	-	
Total%	-	17.0	11.1	11.6	-	5.7	39.9	14.9	-	-	-	-	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	-	264	158	172	-	86	632	237	-	-	-	-	1,549
Approach%	-	62.6	37.4	66.7	-	33.3	72.7	27.3	-	-	-	-	
Total%	-	17.0	10.2	11.1	-	5.6	40.8	15.3	-	-	-	-	
PHF			0.85			0.87			0.88			#DIV/0!	0.92

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

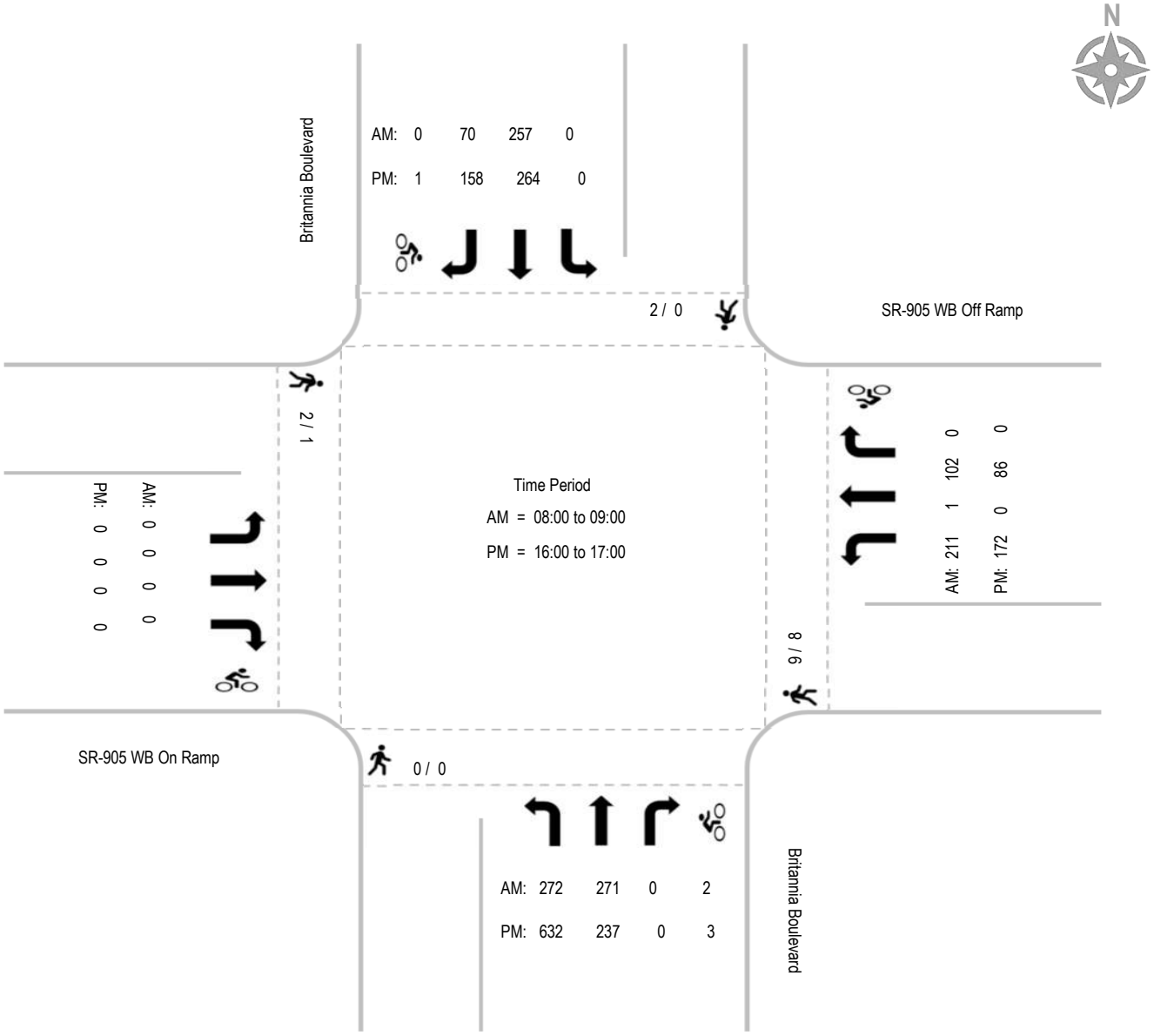
Location:	#02	File Name:	ITM-22-030-02
Intersection:	Britannia Boulevard & SR-905 WB Ramps	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics

AM	Britannia Boulevard Southbound				SR-905 WB Off Ramp Westbound				Britannia Boulevard Northbound				SR-905 WB On Ramp Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
7:15	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0
7:30	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	3	1
7:45	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	3	0
8:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
8:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	2				9				0				2				13	
Bike Total		0	0	0		0	0	0		0	2	0		0	0	0		2

PM	Britannia Boulevard Southbound				SR-905 WB Off Ramp Westbound				Britannia Boulevard Northbound				SR-905 WB On Ramp Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
16:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
16:30	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
16:45	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	3	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
17:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
17:30	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				8				0				1				9	
Bike Total		0	1	0		0	0	0		0	3	0		0	0	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#02	File Name: ITM-22-030-02
	Intersection:	Britannia Boulevard & SR-905 WB Ramps	Project: LLG Ref. 3-21-3491
	Date of Count:	Thursday, April 21, 2022	Britannia Airway Logistics



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#03	File Name:	ITM-22-030-03
Intersection:	Britannia Boulevard & SR-905 EB Ramps	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics

AM	Britannia Boulevard Southbound			SR-905 EB On Ramp Westbound			Britannia Boulevard Northbound			SR-905 EB Off Ramp Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	7	74	0	0	0	0	0	80	45	41	0	143	390
7:15	16	76	0	0	0	0	0	59	33	48	0	162	394
7:30	9	68	0	0	0	0	0	93	47	45	0	155	417
7:45	12	86	0	0	0	0	0	79	32	59	0	181	449
8:00	27	102	0	0	0	0	0	95	50	49	1	175	499
8:15	7	97	0	0	0	0	0	72	38	31	0	138	383
8:30	17	90	0	0	0	0	0	92	46	36	0	141	422
8:45	25	120	0	0	0	0	0	104	46	39	0	148	482
Total	120	713	0	0	0	0	0	674	337	348	1	1243	3436
Approach%	14.4	85.6	-	-	-	-	-	66.7	33.3	21.9	0.1	78.1	
Total%	3.5	20.8	-	-	-	-	-	19.6	9.8	10.1	0.0	36.2	

AM Intersection Peak Hour: **08:00 to 09:00**

Volume	76	409	-	-	-	-	-	363	180	155	1	602	1,786
Approach%	15.7	84.3	-	-	-	-	-	66.9	33.1	20.4	0.1	79.4	
Total%	4.3	22.9	-	-	-	-	-	20.3	10.1	8.7	0.1	33.7	
PHF			0.84			#DIV/0!			0.91			0.84	0.89

PM	Britannia Boulevard Southbound			SR-905 EB On Ramp Westbound			Britannia Boulevard Northbound			SR-905 EB Off Ramp Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	32	73	0	0	0	0	0	191	45	21	0	140	502
16:15	33	79	0	0	0	0	0	172	65	27	0	120	496
16:30	25	59	0	0	0	0	0	194	77	12	1	107	475
16:45	31	51	0	0	0	0	0	174	76	15	0	91	438
17:00	45	74	0	0	0	0	0	156	57	16	1	100	449
17:15	29	67	0	0	0	0	0	189	62	16	0	78	441
17:30	27	73	0	0	0	0	0	151	55	14	0	72	392
17:45	16	37	0	0	0	0	0	106	64	18	0	66	307
Total	238	513	0	0	0	0	0	1333	501	139	2	774	3500
Approach%	31.7	68.3	-	-	-	-	-	72.7	27.3	15.2	0.2	84.6	
Total%	6.8	14.7	-	-	-	-	-	38.1	14.3	4.0	0.1	22.1	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	121	262	-	-	-	-	-	731	263	75	1	458	1,911
Approach%	31.6	68.4	-	-	-	-	-	73.5	26.5	14.0	0.2	85.8	
Total%	6.3	13.7	-	-	-	-	-	38.3	13.8	3.9	0.1	24.0	
PHF			0.85			#DIV/0!			0.92			0.83	0.95

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#03	File Name:	ITM-22-030-03
Intersection:	Britannia Boulevard & SR-905 EB Ramps	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics

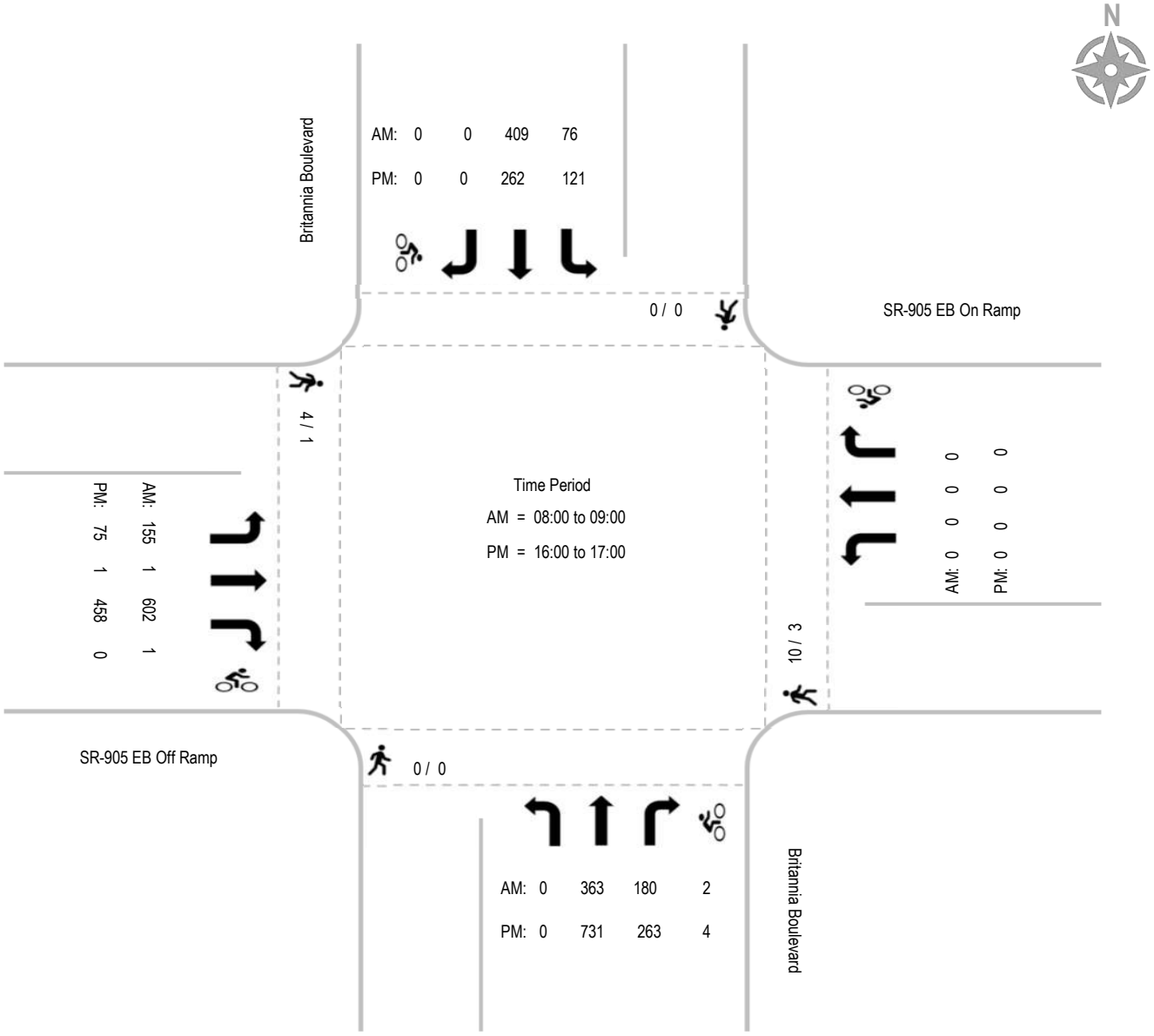
AM	Britannia Boulevard Southbound				SR-905 EB On Ramp Westbound				Britannia Boulevard Northbound				SR-905 EB Off Ramp Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
7:15	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	3	0
7:30	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	3	1
7:45	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	1	4	1
8:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
8:15	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				10				0				4				14	
Bike Total		0	0	0		0	0	0		0	2	0		0	0	1		3

PM	Britannia Boulevard Southbound				SR-905 EB On Ramp Westbound				Britannia Boulevard Northbound				SR-905 EB Off Ramp Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
16:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
17:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				3				0				1				4	
Bike Total		0	0	0		0	0	0		0	3	1		0	0	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#03	File Name:	ITM-22-030-03
Intersection:	Britannia Boulevard & SR-905 EB Ramps	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#04	File Name:	ITM-22-030-04
Intersection:	Britannia Boulevard & Airway Road	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics

AM	Britannia Boulevard Southbound			Airway Road Westbound			Britannia Boulevard Northbound			Airway Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	65	169	25	3	1	84	0	143	2	30	0	3	525
7:15	55	140	13	4	1	89	8	143	9	14	1	1	478
7:30	49	136	4	2	2	104	2	147	4	27	4	2	483
7:45	29	95	10	2	1	73	1	130	4	21	0	2	368
8:00	42	117	9	1	6	71	1	193	3	21	1	1	466
8:15	36	89	10	2	0	57	1	198	3	13	1	0	410
8:30	29	94	7	1	2	62	2	147	2	21	0	0	367
8:45	24	73	4	2	0	45	0	119	1	9	0	0	277
Total	329	913	82	17	13	585	15	1220	28	156	7	9	3374
Approach%	24.8	69.0	6.2	2.8	2.1	95.1	1.2	96.6	2.2	90.7	4.1	5.2	
Total%	9.8	27.1	2.4	0.5	0.4	17.3	0.4	36.2	0.8	4.6	0.2	0.3	

AM Intersection Peak Hour: **07:00 to 08:00**

Volume	198	540	52	11	5	350	11	563	19	92	5	8	1,854
Approach%	25.1	68.4	6.6	3.0	1.4	95.6	1.9	94.9	3.2	87.6	4.8	7.6	
Total%	10.7	29.1	2.8	0.6	0.3	18.9	0.6	30.4	1.0	5.0	0.3	0.4	
PHF			0.76			0.85			0.93			0.80	0.88

PM	Britannia Boulevard Southbound			Airway Road Westbound			Britannia Boulevard Northbound			Airway Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	65	135	13	3	2	18	2	78	3	7	2	1	329
16:15	62	150	18	1	0	27	1	59	1	5	0	1	325
16:30	62	129	28	6	2	54	0	63	0	4	0	0	348
16:45	63	154	32	4	3	47	0	82	3	9	4	2	403
17:00	75	145	18	1	2	39	0	86	4	5	1	5	381
17:15	56	145	18	2	2	38	0	89	6	9	2	1	368
17:30	68	152	25	5	1	44	0	97	3	14	4	2	415
17:45	74	149	15	9	2	22	0	129	4	10	2	4	420
Total	525	1159	167	31	14	289	3	683	24	63	15	16	2989
Approach%	28.4	62.6	9.0	9.3	4.2	86.5	0.4	96.2	3.4	67.0	16.0	17.0	
Total%	17.6	38.8	5.6	1.0	0.5	9.7	0.1	22.9	0.8	2.1	0.5	0.5	

PM Intersection Peak Hour: **17:00 to 18:00**

Volume	273	591	76	17	7	143	-	401	17	38	9	12	1,584
Approach%	29.0	62.9	8.1	10.2	4.2	85.6	-	95.9	4.1	64.4	15.3	20.3	
Total%	17.2	37.3	4.8	1.1	0.4	9.0	-	25.3	1.1	2.4	0.6	0.8	
PHF			0.96			0.84			0.79			0.74	0.94

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

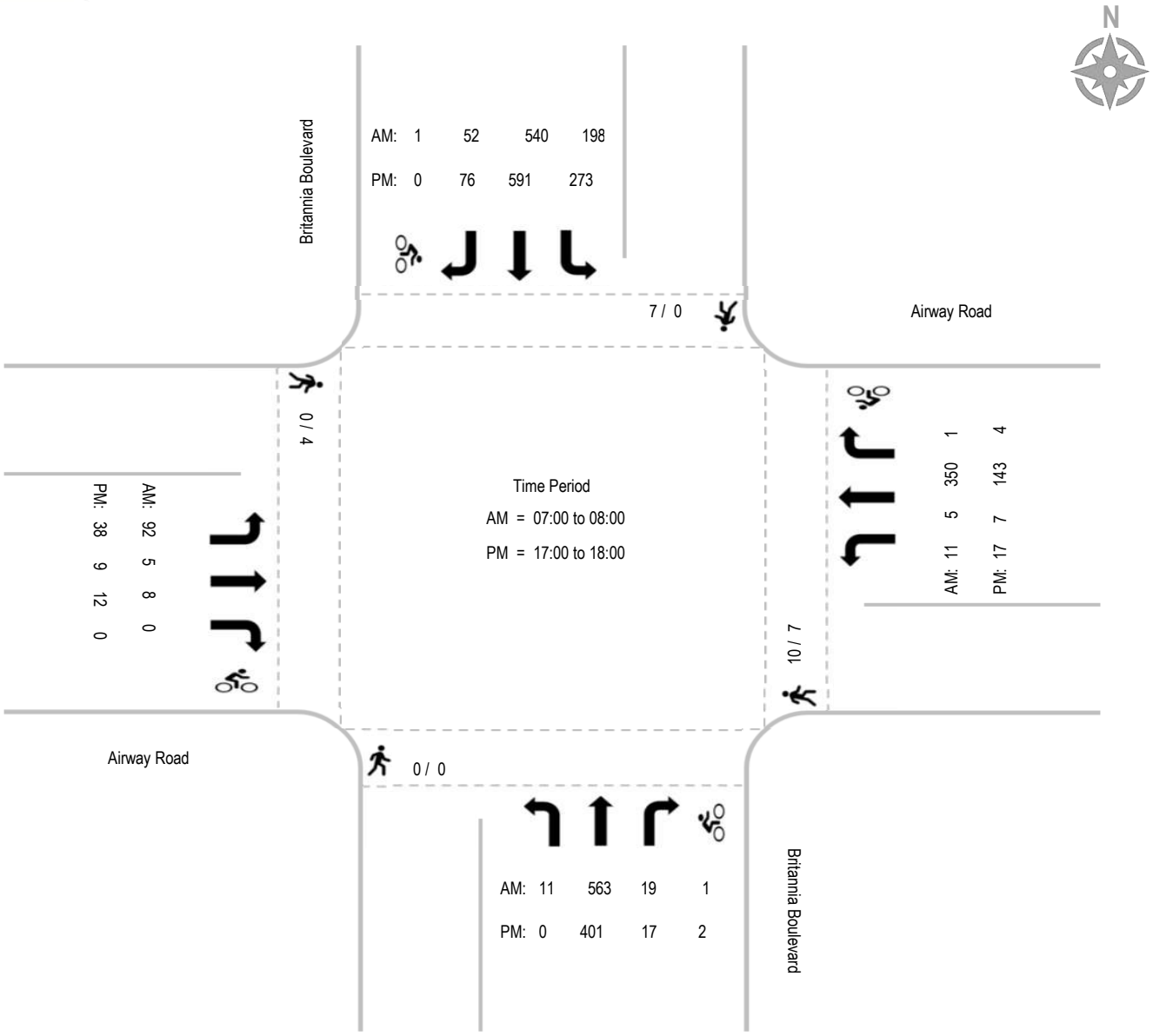
Location:	#04	File Name:	ITM-22-030-04
Intersection:	Britannia Boulevard & Airway Road	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics

AM	Britannia Boulevard Southbound				Airway Road Westbound				Britannia Boulevard Northbound				Airway Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	10	0
7:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
7:45	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1
8:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:15	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	1
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	7				10				0				0				17	
Bike Total		0	0	1		0	0	1		0	1	0		0	0	0		3

PM	Britannia Boulevard Southbound				Airway Road Westbound				Britannia Boulevard Northbound				Airway Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	1	1	0	0	0	0	0	0	3	0	0	0	4	1
16:45	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
17:30	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	3
17:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	0				7				0				4				11	
Bike Total		0	0	0		1	0	3		0	2	0		0	0	0		6

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location: #04	File Name:	ITM-22-030-04
	Intersection: Britannia Boulevard & Airway Road	Project:	LLG Ref. 3-21-3491
	Date of Count: Thursday, April 21, 2022		Britannia Airway Logistics



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#05	File Name:	ITM-22-030-05
Intersection:	Airway Road & Cactus Road	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics

AM	Cactus Road Southbound			Airway Road Westbound			Cactus Road Northbound			Airway Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	0	0	6	3	1	0	0	1	0	0	0	11
7:15	1	0	0	10	2	0	0	0	5	0	1	0	19
7:30	1	0	0	13	1	1	0	0	0	0	2	0	18
7:45	1	0	0	20	3	1	0	1	3	0	1	0	30
8:00	4	0	0	10	1	0	0	1	1	0	2	0	19
8:15	3	0	0	6	4	0	0	1	1	0	1	0	16
8:30	1	1	0	8	1	3	0	0	2	0	2	0	18
8:45	1	0	0	14	2	2	1	0	3	0	0	1	24
Total	12	1	0	87	17	8	1	3	16	0	9	1	155
Approach%	92.3	7.7	-	77.7	15.2	7.1	5.0	15.0	80.0	-	90.0	10.0	
Total%	7.7	0.6	-	56.1	11.0	5.2	0.6	1.9	10.3	-	5.8	0.6	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	7	-	-	53	7	2	-	2	9	-	6	-	86
Approach%	100.0	-	-	85.5	11.3	3.2	-	18.2	81.8	-	100.0	-	
Total%	8.1	-	-	61.6	8.1	2.3	-	2.3	10.5	-	7.0	-	
PHF			0.44			0.65			0.55			0.75	0.72

PM	Cactus Road Southbound			Airway Road Westbound			Cactus Road Northbound			Airway Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	0	0	2	5	0	0	0	1	0	0	0	8
16:15	2	0	0	8	1	0	0	0	4	0	0	0	15
16:30	3	0	0	5	1	0	0	0	2	0	0	0	11
16:45	4	0	0	6	1	0	0	0	5	0	0	0	16
17:00	1	0	0	5	0	0	0	0	3	0	0	0	9
17:15	0	0	0	1	4	0	0	0	1	0	0	0	6
17:30	2	0	0	0	2	0	0	0	4	0	0	0	8
17:45	0	0	0	3	0	0	0	0	1	0	0	0	4
Total	12	0	0	30	14	0	0	0	21	0	0	0	77
Approach%	100.0	-	-	68.2	31.8	-	-	-	100.0	-	-	-	
Total%	15.6	-	-	39.0	18.2	-	-	-	27.3	-	-	-	

PM Intersection Peak Hour: **16:15 to 17:15**

Volume	10	-	-	24	3	-	-	-	14	-	-	-	51
Approach%	100.0	-	-	88.9	11.1	-	-	-	100.0	-	-	-	
Total%	19.6	-	-	47.1	5.9	-	-	-	27.5	-	-	-	
PHF			0.63			0.75			0.70			#DIV/0!	0.80

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

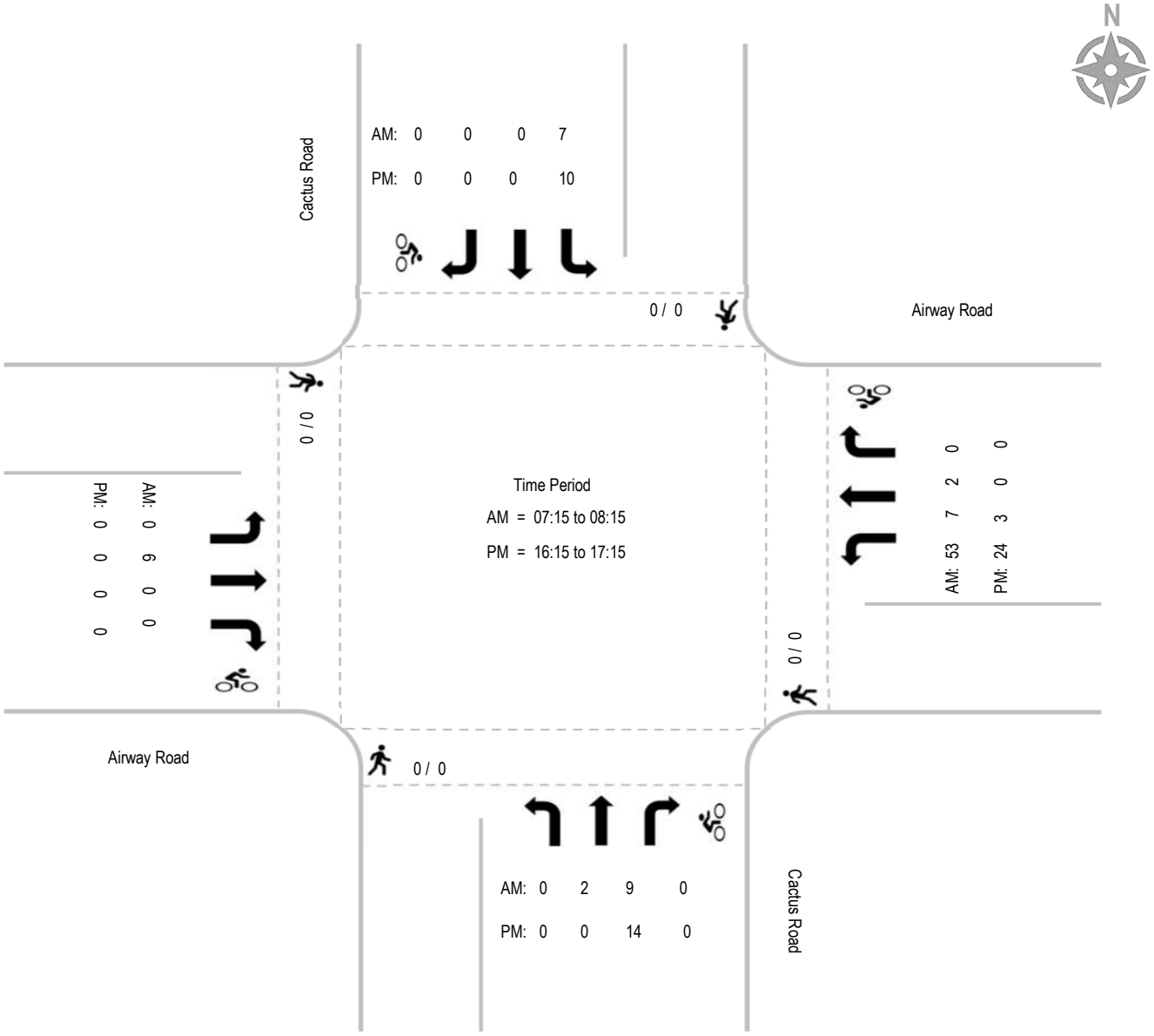
Location:	#05	File Name:	ITM-22-030-05
Intersection:	Airway Road & Cactus Road	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics

AM	Cactus Road Southbound				Airway Road Westbound				Cactus Road Northbound				Airway Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	Cactus Road Southbound				Airway Road Westbound				Cactus Road Northbound				Airway Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location: #05	File Name:	ITM-22-030-05
	Intersection: Airway Road & Cactus Road	Project:	LLG Ref. 3-21-3491
	Date of Count: Thursday, April 21, 2022		Britannia Airway Logistics



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#06	File Name:	ITM-22-030-06
Intersection:	Airway Road & Continental Street	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics

AM	Continental Street Southbound			Airway Road Westbound			- Northbound			Airway Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	4	0	1	0	11	15	0	0	0	0	5	0	36
7:15	2	0	0	0	15	6	0	0	0	0	4	0	27
7:30	0	0	0	0	22	2	0	0	0	0	9	0	33
7:45	2	0	0	0	34	4	0	0	0	0	6	0	46
8:00	1	0	0	0	20	5	0	0	0	0	8	0	34
8:15	2	0	0	0	21	3	0	0	0	0	8	0	34
8:30	4	0	0	0	31	2	0	0	0	0	10	0	47
8:45	0	0	0	0	21	3	0	0	0	0	13	0	37
Total	15	0	1	0	175	40	0	0	0	0	63	0	294
Approach%	93.8	-	6.3	-	81.4	18.6	-	-	-	-	100.0	-	
Total%	5.1	-	0.3	-	59.5	13.6	-	-	-	-	21.4	-	

AM Intersection Peak Hour: **07:45 to 08:45**

Volume	9	-	-	-	106	14	-	-	-	-	32	-	161
Approach%	100.0	-	-	-	88.3	11.7	-	-	-	-	100.0	-	
Total%	5.6	-	-	-	65.8	8.7	-	-	-	-	19.9	-	
PHF			0.56			0.79			#DIV/0!			0.80	0.88

PM	Continental Street Southbound			Airway Road Westbound			- Northbound			Airway Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	1	0	0	0	2	9	0	0	0	0	29	0	41
16:15	3	0	0	0	14	1	0	0	0	0	13	0	31
16:30	7	0	0	0	10	2	0	0	0	0	19	0	38
16:45	2	0	0	0	11	1	0	0	0	0	26	0	40
17:00	1	0	0	0	11	0	0	0	0	0	23	0	35
17:15	0	0	0	0	0	9	0	0	0	0	13	0	22
17:30	1	0	0	0	0	9	0	0	0	0	20	0	30
17:45	0	0	0	0	7	1	0	0	0	0	9	0	17
Total	15	0	0	0	55	32	0	0	0	0	152	0	254
Approach%	100.0	-	-	-	63.2	36.8	-	-	-	-	100.0	-	
Total%	5.9	-	-	-	21.7	12.6	-	-	-	-	59.8	-	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	13	-	-	-	37	13	-	-	-	-	87	-	150
Approach%	100.0	-	-	-	74.0	26.0	-	-	-	-	100.0	-	
Total%	8.7	-	-	-	24.7	8.7	-	-	-	-	58.0	-	
PHF			0.46			0.83			#DIV/0!			0.75	0.91

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#06	File Name:	ITM-22-030-06
Intersection:	Airway Road & Continental Street	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics

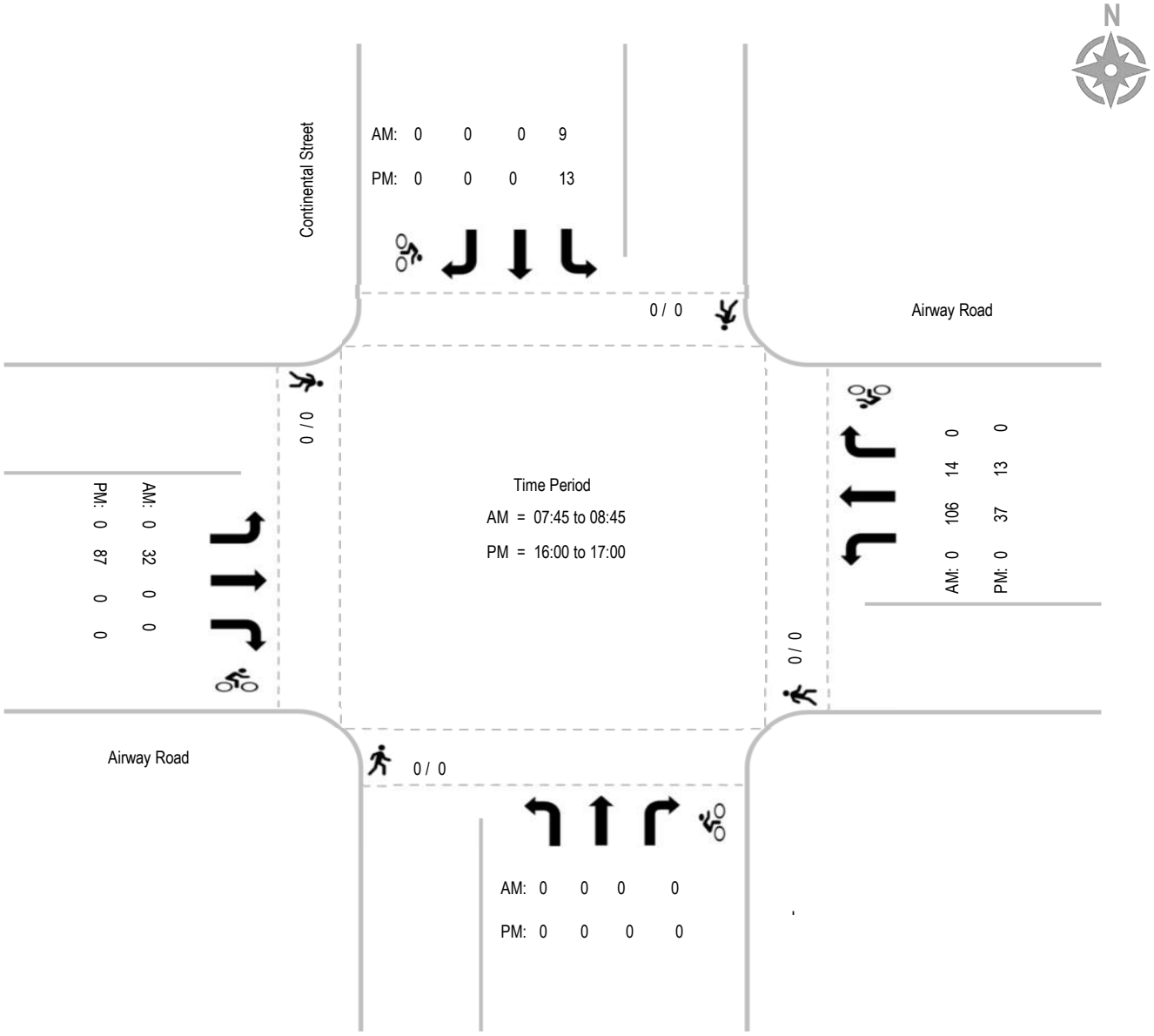
AM	Continental Street Southbound				Airway Road Westbound				- Northbound				Airway Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	Continental Street Southbound				Airway Road Westbound				- Northbound				Airway Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#06	File Name:	ITM-22-030-06
Intersection:	Airway Road & Continental Street	Project:	LLG Ref. 3-21-3491
Date of Count:	Thursday, April 21, 2022		Britannia Airway Logistics



Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Britannia Blvd, between Otay Mesa Rd and SR 905 WB Ramps**

Date: **Thursday, April 21, 2022** Total Daily Volume: **13397** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
80	103	90	101	271	391	603	724	904	802	893	1056	993	933	949	1058	897	738	528	340	347	254	208	134
22	38	26	14	35	74	106	143	209	201	237	285	274	259	229	245	255	259	144	103	79	58	73	45
18	14	22	24	50	84	164	166	197	209	206	277	245	219	220	247	198	179	155	82	78	47	54	20
23	19	17	21	78	97	137	186	246	199	199	247	235	272	246	305	249	179	125	77	97	77	44	35
17	32	25	42	108	136	196	229	252	193	251	247	239	183	254	261	195	121	104	78	93	72	37	34

Date: **Thursday, April 21, 2022** Total Daily Volume: **6716** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
38	51	40	47	170	252	330	430	465	425	491	562	521	462	469	474	398	289	227	149	156	114	90	66
11	17	13	7	24	47	67	95	111	117	124	148	147	119	106	119	122	87	62	39	45	32	28	26
4	7	8	11	33	55	90	81	116	103	126	148	118	115	104	109	100	76	69	30	38	19	28	8
12	11	10	6	44	64	69	116	125	101	115	141	118	129	137	112	89	67	46	44	38	24	19	18
11	16	9	23	69	86	104	138	113	104	126	125	138	99	122	134	87	59	50	36	35	39	15	14

Date: **Thursday, April 21, 2022** Total Daily Volume: **6681** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
42	52	50	54	101	139	273	294	439	377	402	494	472	471	480	584	499	449	301	191	191	140	118	68
11	21	13	7	11	27	39	48	98	84	113	137	127	140	123	126	133	172	82	64	34	26	45	19
14	7	14	13	17	29	74	85	81	106	80	129	127	104	116	138	98	103	86	52	40	28	26	12
11	8	7	15	34	33	68	70	121	98	84	106	117	143	109	193	160	112	79	33	59	53	25	17
6	16	16	19	39	50	92	91	139	89	125	122	101	84	132	127	108	62	54	42	58	33	22	20

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Britannia Blvd, between SR 905 WB Ramps and SR 905 EB Ramps**

Date: **Thursday, April 21, 2022** Total Daily Volume: **24503** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
313	339	169	188	438	644	1045	1177	1411	1481	1572	1697	1651	1664	1772	1861	1700	1345	938	751	676	653	613	405
96	100	49	38	74	151	191	283	359	340	371	441	445	437	447	444	474	389	258	227	163	154	183	133
69	78	45	50	99	123	277	251	319	395	358	421	403	413	404	403	412	400	226	168	164	142	141	69
69	77	33	47	126	170	278	308	357	392	393	424	432	428	449	510	425	316	253	159	186	187	144	106
79	84	42	53	139	200	299	335	376	354	450	411	371	386	472	504	389	240	201	197	163	170	145	97

Date: **Thursday, April 21, 2022** Total Daily Volume: **14005** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
241	266	117	109	273	393	586	638	700	750	807	901	880	870	1006	1097	1073	795	497	363	425	452	454	312
73	72	39	21	46	87	133	159	176	192	210	225	253	204	242	285	299	213	138	111	98	111	136	107
52	68	33	32	60	70	144	125	167	201	192	236	203	217	221	222	249	249	135	68	108	99	98	49
51	62	23	28	78	107	144	171	185	175	189	229	222	241	271	296	266	180	116	79	132	114	115	86
65	64	22	28	89	129	165	183	172	182	216	211	202	208	272	294	259	153	108	105	87	128	105	70

Date: **Thursday, April 21, 2022** Total Daily Volume: **10498** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
72	73	52	79	165	251	459	539	711	731	765	796	771	794	766	764	627	550	441	388	251	201	159	93
23	28	10	17	28	64	58	124	183	148	161	216	192	233	205	159	175	176	120	116	65	43	47	26
17	10	12	18	39	53	133	126	152	194	166	185	200	196	183	181	163	151	91	100	56	43	43	20
18	15	10	19	48	63	134	137	172	217	204	195	210	187	178	214	159	136	137	80	54	73	29	20
14	20	20	25	50	71	134	152	204	172	234	200	169	178	200	210	130	87	93	92	76	42	40	27

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Britannia Blvd, between SR 905 EB Ramps and Airway Rd**

Date: **Thursday, April 21, 2022** Total Daily Volume: **39192** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
526	522	346	404	799	1173	1990	1938	2145	2171	2403	2724	2584	2650	2797	2852	2580	1930	1370	1200	1162	1222	1034	670
152	142	90	89	131	224	380	460	533	512	622	696	689	640	757	679	679	566	379	331	276	294	301	201
116	110	90	93	175	254	495	423	483	559	602	679	651	550	632	641	608	531	309	257	296	304	251	153
133	142	75	97	215	294	537	489	577	535	597	676	633	730	679	735	713	445	357	312	320	342	242	175
125	128	91	125	278	401	578	566	552	565	582	673	611	730	729	797	580	388	325	300	270	282	240	141

Date: **Thursday, April 21, 2022** Total Daily Volume: **19715** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
294	341	139	153	255	372	595	692	868	999	1246	1511	1388	1404	1585	1760	1648	1203	730	558	528	542	525	379
86	93	51	37	45	95	121	188	213	248	351	414	395	320	410	408	386	350	226	159	125	135	158	117
65	83	37	34	61	76	162	128	198	261	317	356	352	272	339	376	361	344	172	114	137	128	112	68
67	90	26	35	84	88	174	180	240	252	299	369	299	412	425	468	493	273	182	146	160	151	129	110
76	75	25	47	65	113	138	196	217	238	279	372	342	400	411	508	408	236	150	139	106	128	126	84

Date: **Thursday, April 21, 2022** Total Daily Volume: **19477** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
232	181	207	251	544	801	1395	1246	1277	1172	1157	1213	1196	1246	1212	1092	932	727	640	642	634	680	509	291
66	49	39	52	86	129	259	272	320	264	271	282	294	320	347	271	293	216	153	172	151	159	143	84
51	27	53	59	114	178	333	295	285	298	285	323	299	278	293	265	247	187	137	143	159	176	139	85
66	52	49	62	131	206	363	309	337	283	298	307	334	318	254	267	220	172	175	166	160	191	113	65
49	53	66	78	213	288	440	370	335	327	303	301	269	330	318	289	172	152	175	161	164	154	114	57

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Britannia Blvd, South of Airway Rd**

Date: **Thursday, April 21, 2022** Total Daily Volume: **27043** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
396	405	237	268	562	841	1204	1184	1378	1512	1586	1720	1699	1809	1833	1842	1680	1374	1056	945	1003	1059	897	553
118	102	65	63	89	162	237	297	330	370	420	414	450	431	468	413	440	400	319	263	241	269	265	168
89	98	49	80	117	189	320	276	324	366	393	456	417	396	448	462	422	370	241	202	254	251	225	146
96	115	56	60	156	210	316	289	351	380	387	446	407	486	453	471	460	320	255	238	266	295	202	126
93	90	67	65	200	280	331	322	373	396	386	404	425	496	464	496	358	284	241	242	242	244	205	113

Date: **Thursday, April 21, 2022** Total Daily Volume: **13675** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
225	270	95	83	206	301	474	460	607	747	810	937	884	952	1022	1060	1001	837	549	425	464	469	478	319
73	72	40	20	31	70	97	136	140	196	238	238	255	221	260	224	232	248	201	112	120	126	139	106
49	74	22	33	47	70	141	96	148	177	192	244	216	202	239	255	237	232	129	99	116	105	108	71
47	75	13	18	68	69	123	107	155	189	201	245	195	252	274	282	301	182	129	106	128	127	112	72
56	49	20	12	60	92	113	121	164	185	179	210	218	277	249	299	231	175	90	108	100	111	119	70

Date: **Thursday, April 21, 2022** Total Daily Volume: **13368** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
171	135	142	185	356	540	730	724	771	765	776	783	815	857	811	782	679	537	507	520	539	590	419	234
45	30	25	43	58	92	140	161	190	174	182	176	195	210	208	189	208	152	118	151	121	143	126	62
40	24	27	47	70	119	179	180	176	189	201	212	201	194	209	207	185	138	112	103	138	146	117	75
49	40	43	42	88	141	193	182	196	191	186	201	212	234	179	189	159	138	126	132	138	168	90	54
37	41	47	53	140	188	218	201	209	211	207	194	207	219	215	197	127	109	151	134	142	133	86	43

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Airway Rd, between Cactus Rd and Continental St**

Date: **Thursday, April 21, 2022** Total Daily Volume: **1880** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
6	10	15	7	18	43	101	110	125	116	143	172	144	138	153	153	130	101	55	59	29	23	20	9
0	2	3	3	0	6	17	16	27	16	43	41	39	38	45	34	38	36	13	23	11	8	3	5
4	0	5	2	0	9	21	20	24	34	41	55	30	28	35	34	26	23	11	8	5	9	4	2
1	4	3	2	8	10	25	32	40	32	35	33	42	33	38	54	31	28	16	17	6	4	5	2
1	4	4	0	10	18	38	42	34	34	24	43	33	39	35	31	35	14	15	11	7	2	8	0

Date: **Thursday, April 21, 2022** Total Daily Volume: **881** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
3	4	7	2	3	12	24	23	36	56	81	77	66	61	89	90	88	62	27	29	17	12	8	4
0	0	3	1	0	3	7	5	7	8	27	26	25	18	26	15	28	21	4	8	7	5	1	2
3	0	1	0	0	4	9	4	7	17	25	22	11	11	19	16	13	15	7	3	4	5	1	1
0	2	2	1	1	1	4	6	9	12	16	13	16	15	24	42	21	19	8	12	4	2	1	1
0	2	1	0	2	4	4	8	13	19	13	16	14	17	20	17	26	7	8	6	2	0	5	0

Date: **Thursday, April 21, 2022** Total Daily Volume: **999** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
3	6	8	5	15	31	77	87	89	60	62	95	78	77	64	63	42	39	28	30	12	11	12	5
0	2	0	2	0	3	10	11	20	8	16	15	14	20	19	19	10	15	9	15	4	3	2	3
1	0	4	2	0	5	12	16	17	17	16	33	19	17	16	18	13	8	4	5	1	4	3	1
1	2	1	1	7	9	21	26	31	20	19	20	26	18	14	12	10	9	8	5	2	2	4	1
1	2	3	0	8	14	34	34	21	15	11	27	19	22	15	14	9	7	7	5	5	2	3	0

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Airway Rd, between Continental St and Britannia Blvd**

Date: **Thursday, April 21, 2022** Total Daily Volume: **2665** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
9	11	21	8	36	60	200	168	195	168	220	243	179	189	217	211	166	115	72	74	34	30	24	15
0	2	5	3	0	9	24	36	38	27	60	61	40	53	56	58	42	43	14	29	13	9	4	8
6	0	7	3	6	10	47	31	44	48	60	78	42	43	53	52	37	23	13	9	5	13	6	2
1	4	5	2	19	13	52	41	61	45	55	50	54	39	56	63	41	32	23	22	10	5	7	5
2	5	4	0	11	28	77	60	52	48	45	54	43	54	52	38	46	17	22	14	6	3	7	0

Date: **Thursday, April 21, 2022** Total Daily Volume: **1239** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
4	4	10	2	11	18	48	39	64	77	125	104	84	85	128	131	114	72	37	33	17	16	7	9
0	0	4	1	0	5	10	10	9	13	38	38	25	23	30	31	33	28	4	10	7	6	1	5
4	0	1	0	4	4	20	7	16	25	41	28	17	21	28	33	20	14	8	3	4	7	1	0
0	2	4	1	5	3	8	7	20	17	23	19	23	16	37	48	30	21	12	13	4	3	1	4
0	2	1	0	2	6	10	15	19	22	23	19	19	25	33	19	31	9	13	7	2	0	4	0

Date: **Thursday, April 21, 2022** Total Daily Volume: **1426** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
5	7	11	6	25	42	152	129	131	91	95	139	95	104	89	80	52	43	35	41	17	14	17	6
0	2	1	2	0	4	14	26	29	14	22	23	15	30	26	27	9	15	10	19	6	3	3	3
2	0	6	3	2	6	27	24	28	23	19	50	25	22	25	19	17	9	5	6	1	6	5	2
1	2	1	1	14	10	44	34	41	28	32	31	31	23	19	15	11	11	11	9	6	2	6	1
2	3	3	0	9	22	67	45	33	26	22	35	24	29	19	19	15	8	9	7	4	3	3	0

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Cactus Rd, South of Airway Rd**

Date: **Thursday, April 21, 2022** Total Daily Volume: **1313** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
5	7	13	7	14	35	82	88	79	76	95	112	91	99	112	125	94	78	28	26	18	11	14	4
0	1	3	3	0	4	16	13	15	14	21	30	22	30	31	25	24	25	4	10	7	3	2	1
3	1	4	2	2	7	15	15	16	16	35	34	19	21	31	25	20	16	7	3	2	5	5	1
1	4	2	2	3	9	21	24	27	18	25	23	31	21	28	49	22	24	6	8	6	2	4	2
1	1	4	0	9	15	30	36	21	28	14	25	19	27	22	26	28	13	11	5	3	1	3	0

Date: **Thursday, April 21, 2022** Total Daily Volume: **602** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
2	2	6	2	5	9	23	9	13	37	52	52	40	45	67	73	65	50	12	14	9	6	6	3
0	0	3	1	0	3	6	2	2	8	14	21	15	13	16	7	20	17	1	5	4	2	1	1
2	0	1	0	1	2	8	1	2	6	19	14	7	7	15	12	10	9	4	2	2	3	2	0
0	2	1	1	1	0	4	3	1	6	14	12	9	12	20	39	16	16	2	5	3	1	1	2
0	0	1	0	3	4	5	3	8	17	5	5	9	13	16	15	19	8	5	2	0	0	2	0

Date: **Thursday, April 21, 2022** Total Daily Volume: **711** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
3	5	7	5	9	26	59	79	66	39	43	60	51	54	45	52	29	28	16	12	9	5	8	1
0	1	0	2	0	1	10	11	13	6	7	9	7	17	15	18	4	8	3	5	3	1	1	0
1	1	3	2	1	5	7	14	14	10	16	20	12	14	16	13	10	7	3	1	0	2	3	1
1	2	1	1	2	9	17	21	26	12	11	11	22	9	8	10	6	8	4	3	3	1	3	0
1	1	3	0	6	11	25	33	13	11	9	20	10	14	6	11	9	5	6	3	3	1	1	0

INTERSECTION: BRITANNIA BLVD @ OTAY MESA RD

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street Name: **Britannia Blvd**
E/W Street Name: **Otay Mesa Rd**

Last Database Change:

Sent to Street Div 7/13/17

Change Record		
Timing Sheet By	Approved By	Date
MB	M25	

Notes: ***Phase 2&8 overlap is hard wired***

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Free Lag <C/1+F+0>: _2__6_8

Drop Number		<C/0+0+0>
Zone Number		<C/0+0+1>
Area Number		<C/0+0+2>
Area Address		<C/0+0+3>
QuicNet Channel		(QuicNet)

Communication Addresses

Manual Plan	14	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>
FYA Red Revert	0.0	<F/1+0+5>
OVLP CHG Red	0.0	<F/1+0+3>

Start / Revert Times

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase
(Outputs specified in Assignable Outputs at E/127+A+E & F)

		OTAY MESA				OTAY MESA		BRITANNIA
		Phase						
Column Numbers --->		1	2	3	4	5	6	7	8
Row		N							2+8
0	Ped Walk		7						7
1	Ped FDW		35						34
2	Min Green	4	10				10		7
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	4.4				4.3		2.0
6	Max Gap	2.0	4.4				4.3		2.0
7	Min Gap	2.0	0.2				0.2		0.2
8	Max Limit	30	60				60		40
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW		1						1
C	Cond Serv Check								
D	Reduce Every		0.7				0.7		1.7
E	Yellow Change	3.4	5.0				5.0		4.3
F	Red Clear	1.0	1.0				1.0		1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing <F/1+E+Row>

	F	Row
Permit	12__6_8	0
Red Lock		1
Yellow Lock		2
Min Recall	_2__6__	3
Ped Recall		4
View Sel Peds	_2____8	5
Rest In Walk		6
Red Rest		7
Dual Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	_2__6__	E
First Phases	____8	F

Phase Functions <F/1+F+Row>

How to Set Page Access Code: F/1 -- C + 0 + F = 1

INTERSECTION: BRITANNIA BLVD @ OTAY MESA RD

Row	Column Numbers ----> / Overlap Name ---->	Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8	Overlap Recall								
9	Queue Jump Phase								
A	Queue Jump Time								
B	Minimum Green								
C	Maximum Green								
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Overlap Assignments <E/29+Column+Row>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = Solid FDW on EV
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

Extra 2 Flags
1 = AWB During Initial
2 = Reserved
3 = Disable Min Walk
4 = QuicNet System
5 = Ignore P/P on EV
6 = Manual Hold in FDW
7 = Allow QuicNet PE
8 = Flash Grn B4 Yellow

	C	Row
EV-A	0	0
EV-B	0	1
EV-C	0	2
EV-D	0	3
RR-1 *	- - -	4
RR-2 *	- - -	5
SE-1	0	6
SE-2	0	7
		8
		9
		A
		B
		C
		D
		E
		F

Preempt Priority <E/125+C+Row>
(* RR-1 is always Highest, and RR-2 is always Second Highest)

Row	Column Numbers ---->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2
B	EV-B Phases	
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 34
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	
Ped for 2P Output	2
Ped for 6P Output	
Ped for 4P Output	
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Configuration <E/125+F+Row>

	F
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	12345678
Sequential Timing	
Advance Walk Phases	
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	12345678
Start-up Ped Calls	12345678

Specials <F/2+F+Row>

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 =
5 =
6 = Simplex Master
7 =
8 = Offset Interrupter

	2	Row
		0
Phase 1	10	1
Phase 2	10	2
Phase 3	10	3
Phase 4	10	4
Phase 5	10	5
Phase 6	10	6
Phase 7	10	7
Phase 8	10	8
		9
		A
		B
		C
		D
		E
		F

Coordination Transition Minimums <C/5+2+Row>

INTERSECTION: BRITANNIA BLVD @ OTAY MESA RD

Column Numbers ---->	0	1	2	3	1	3
Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0	2I2U	39	45_7	2	123		1.8
1	6J2U	40	45_7	6	123		1.8
2		41	45_7	4	123		
3	8J6U	42	45_7	8	123		1.8
4		43	45_7	2	123		
5		44	45_7	6	123		
6		45	45_7	4	123		
7		46	45_7	8	123		
8		47	67	2	123		
9		48	67	6	123		
A		49	67	4	123		
B	8J8	50	45_7	8	123	10.0	
C		55	45_7	5	123		
D		56	45_7	1	123		
E		57	45_7	7	123		
F		58	45_7	3	123		

	4	5	6	7	2	4
Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0		59	45_7	5	123		
1		60	45_7	1	123		
2		61	45_7	7	123		
3		62	45_7	3	123		
4		63	45_7	2	123		
5		64	45_7	6	123		
6		65	45_7	4	123		
7	8J7U	66	45_7	8	123		1.8
8		67	2	2	123		
9		68	2	6	123		
A		69	2	4	123		
B		70	2	8	123		
C		76	45_7	2	123		
D		77	45_7	6	123		
E		78	45_7	4	123		
F	8J7L	79	45_7	8	123		1.8

Detector Assignments <E/126+Column+Row> **<D/0+Column+Row>**

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 = Overlap
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

Column Numbers ---->	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	0	<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	20	<D/0+0+1>
Max ON (minutes)	7	<D/0+0+2>
Chatter Fail Time	0	<D/0+0+4>

Detector Failure Monitor

	B	Row
One-Shot	0	8
Ext. Timer	0	9
DELAY-A	0	A
DELAY-B	0	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

Delay Logic Times
<D/0+B+Row> (seconds)

INTERSECTION: BRITANNIA BLVD @ OTAY MESA RD

Row	Time	Plan	Offset	Day of Week
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.1+Row>
(Bank 1)

Time	Funct.	Day of Week	Column 4 Phases/Bits

TOD Function <7/0.1+Row> <E/27+4+Row>

Day	Year	Month	Holiday Type

Holiday Dates <8/1.1+Row>
(Bank 1)

Time	Plan	Offset	Holiday Type

Holiday Events <9/1.1+Row>
(Bank 1)

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 5 - Disable Low Priority Preempt
Bit 6 - FYA Inhibit
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Offset Select
A = Offset A
B = Offset B
C = Offset C

Row	Time	Plan	Offset	Day of Week
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <C+0+9=0.2>
(Bank 2)

Time	Funct.	Holiday Type	Column 4 Phases/Bits

Holiday TOD Function <C+0+7=0.2> <C+0+E=28>

Day	Year	Month	Holiday Type

Holiday Dates <C+0+8=1.2>
(Bank 2)

Time	Plan	Offset	Holiday Type

Holiday Events <C+0+9=1.2>
(Bank 2)

Month Select: October = A, November = B, Decmber = C

INTERSECTION: BRITANNIA BLVD @ OTAY MESA RD

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

Row	Column Numbers ----> / Plan Name ---->	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9	Row
0	Cycle Length										0
1	Phase 1 - ForceOff										1
2	Phase 2 - ForceOff										2
3	Phase 3 - ForceOff										3
4	Phase 4 - ForceOff										4
5	Phase 5 - ForceOff										5
6	Phase 6 - ForceOff										6
7	Phase 7 - ForceOff										7
8	Phase 8 - ForceOff										8
9	Ring Offset										9
A	Offset 1										A
B	Offset 2										B
C	Offset 3										C
D	Perm 1 - End										D
E	Hold Release										E
F	Reserved										F

Coordination - Bank 1 <C/1+Plan+Row>

Row		E	Row
			0
1	Plan 1 - Sync		1
2	Plan 2 - Sync		2
3	Plan 3 - Sync		3
4	Plan 4 - Sync		4
5	Plan 5 - Sync		5
6	Plan 6 - Sync		6
7	Plan 7 - Sync		7
8	Plan 8 - Sync		8
9	Plan 9 - Sync		9
A	NEMA Sync		A
B	NEMA Hold		B
C			C
D			D
E	Coord Extra		E
F			F

Sync Phases <C/1+E+Row>

Row		Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9	Row
0	Ped Adjustment										0
1	Perm 2 - Start										1
2	Perm 2 - End										2
3	Perm 3 - Start										3
4	Perm 3 - End										4
5	Reservice Time										5
6	Reservice Phases										6
7											7
8	Pretimed Phases										8
9	Max Recall										9
A	Perm 1 Veh Phase										A
B	Perm 1 Ped Phase										B
C	Perm 2 Veh Phase										C
D	Perm 2 Ped Phase										D
E	Perm 3 Veh Phase										E
F	Perm 3 Ped Phase										F

Coordination - Bank 2 <C/2+Plan+Row>

Row		F	Row
0	Free Lag		0
1	Plan 1 - Lag		1
2	Plan 2 - Lag		2
3	Plan 3 - Lag		3
4	Plan 4 - Lag		4
5	Plan 5 - Lag		5
6	Plan 6 - Lag		6
7	Plan 7 - Lag		7
8	Plan 8 - Lag		8
9	Plan 9 - Lag		9
A	External Lag		A
B	Lag Hold		B
C			C
D			D
E			E
F			F

Lag Phases <C/1+F+Row>

Coordination Timing By:
Date:

INTERSECTION: BRITANNIA BLVD @ OTAY MESA RD

Row	Column 8	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	One-Shot Timer	Latch 1 Set	NOT-3	Max 2	Pretimed	Set Monday	Dial 2 (7-Wire)	Sim Term 0	0
1	AND-5 (a)	Latch 1 Reset	NOT-4	Reserved	Plan 1	Ext. Perm 1	Dial 3 (7-Wire)	EV-A 71	1
2	AND-5 (b)	Latch 2 Set	OR-4 (a)	Reserved	Plan 2	Ext. Perm 2	Offset 1 (7-Wire)	EV-B 72	2
3	AND-6 (a)	Latch 2 Reset	OR-4 (b)	Reserved	Plan 3	Gate Down	Offset 2 (7-Wire)	EV-C 73	3
4	AND-6 (b)	NAND-3 (a)	OR-5 (a)	Reserved	Plan 4	Set Clock	Offset 3 (7-Wire)	EV-D 74	4
5	Reserved	NAND-3 (b)	OR-5 (b)	Reserved	Plan 5	Stop Time 82	Free (7-Wire)	RR-1 51	5
6	Reserved	NAND-4 (a)	OR-6 (a)	Reserved	Plan 6	Flash Sense 81	Flash (7-Wire)	RR-2 52	6
7	Reserved	NAND-4 (b)	OR-6 (b)	Reserved	Plan 7	Manual Enable	Excl. Ped Omit	Spec. Event 1	7
8	Spec. Funct. 1	OR-7 (a)	EXTMR	Reserved	Plan 8	Man. Advance	NOT-1	Spec. Event 2	8
9	Spec. Funct. 2	OR-7 (b)	Reserved	Max Inhibit (nema)	Plan 9	External Alarm	NOT-2	External Lag	9
A	Spec. Funct. 3	OR-7 (c)	AND-4 (a)	Force A (nema)	DELAY-A	Phase Bank 2	OR-1 (a)	AND-1 (a)	A
B	Spec. Funct. 4	OR-7 (d)	AND-4 (b)	Force B (nema)	DELAY-B	Phase Bank 3	OR-1 (b)	AND-1 (b)	B
C	Reserved	OR-8 (a)	NAND-1 (a)	C.N.A. (nema)	DELAY-C	Overlap Set 2	OR-2 (a)	AND-2 (a)	C
D	Reserved	OR-8 (b)	NAND-1 (b)	Hold (nema)	DELAY-D	Overlap Set 3	OR-2 (b)	AND-2 (b)	D
E	Reserved	OR-8 (c)	NAND-2 (a)	Max Recall	DELAY-E	Detector Set 2	OR-3 (a)	AND-3 (a)	E
F	Reserved	OR-8 (d)	NAND-2 (b)	Min Recall	DELAY-F	Detector Set 3	OR-3 (b)	AND-3 (b)	F

Assignable Inputs <E/126+Column+Row>

Row	Column 8	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	Reserved	Phase ON - 1	Preempt Fail	Flasher 0	Free	NOT-1	TOD Out 1	Dial 2 (7-Wire)	0
1	Reserved	Phase ON - 2	Sp Evnt Out 1	Flasher 1	Plan 1	OR-1	TOD Out 2	Dial 3 (7-Wire)	1
2	Reserved	Phase ON - 3	Sp Evnt Out 2	Fast Flasher	Plan 2	OR-2	TOD Out 3	Offset 1 (7-Wire)	2
3	Reserved	Phase ON - 4	Sp Evnt Out 3	EXTMR	Plan 3	OR-3	TOD Out 4	Offset 2 (7-Wire)	3
4	Reserved	Phase ON - 5	Sp Evnt Out 4	One-Shot Timer	Plan 4	AND-1	TOD Out 5	Offset 3 (7-Wire)	4
5	Reserved	Phase ON - 6	Sp Evnt Out 5	Reserved	Plan 5	AND-2	TOD Out 6	Free (7-Wire)	5
6	Reserved	Phase ON - 7	Sp Evnt Out 6	Latch 1	Plan 6	AND-3	TOD Out 7	Flash (7-Wire)	6
7	Reserved	Phase ON - 8	Sp Evnt Out 7	Latch 2	Plan 7	NOT-2	TOD Out 8	Preempt	7
8	Flh Yell Arrow 1	Ph. Check - 1	Sp Evnt Out 8	NOT-3	Plan 8	EV-A	Adv. Warn - 1	Low Priority A	8
9	Green 1	Ph. Check - 2	Coord On	NOT-4	Plan 9	EV-B	Adv. Warn - 2	Low Priority B	9
A	Flh Yell Arrow 3	Ph. Check - 3	Detector Fail	OR-4	Spec. Funct. 3	EV-C	DELAY-A	Low Priority C	A
B	Green 3	Ph. Check - 4	Spec. Funct. 1	OR-5	Spec. Funct. 4	EV-D	DELAY-B	Low Priority D	B
C	Flh Yell Arrow 5	Ph. Check - 5	Spec. Funct. 2	OR-6	NAND-3	RR-1	DELAY-C	AND-5	C
D	Green 5	Ph. Check - 6	Central Control	AND-4	NAND-4	RR-2	DELAY-D	AND-6	D
E	Flh Yell Arrow 7	Ph. Check - 7	Excl. Ped DW	NAND-1	OR-7	Spec. Event 1	DELAY-E	Reserved	E
F	Green 7	Ph. Check - 8	Excl. Ped WK	NAND-2	OR-8	Spec. Event 2	DELAY-F	Reserved	F

Assignable Outputs <E/127+Column+Row>

INTERSECTION: Airway Rd @ Britannia Bl

Group Assignment:
Field Master Assignment:

N/S Street Name: Britannia
E/W Street Name: Airway

Last Database Change:
System Ref. Number:

Row	Phase # ---->	1	2	3	4	5	6	7	8
	Column # ---->								
			Britannia				Britannia	Airway	Airway
0	Ped Walk		7						7
1	Ped FDW		21						27
2	Min Green	4	10			4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.8			2.0	3.8	2.0	3.7
6	Max Gap	2.0	3.8			2.0	3.8	2.0	3.7
7	Min Gap	2.0	0.2			2.0	0.2	0.2	0.2
8	Max Limit	30	60			30	60	40	40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1	0.1	0.1
D	Every		0.8				0.8	1.7	0.8
E	Yellow	3.4	3.9			3.4	4.1	4.3	4.2
F	Red Clear	1.0	1.0			1.0	1.0	1.0	1.0
	Grade								

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	12__5678	0
Red Lock		1
Yellow Lock		2
Min Recall		3
Ped Recall		4
Peds (View)	_2____8	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall	_2___6__	A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	_____7_	F

Phase Functions <F Page>
F + F + Row

Max Initial	0
Red Revert	5.0
All Red Start	0.0

F + 0 + E
F + 0 + F
F + C + O

Start / Revert Times

Drop Number	
Zone Number	
Area Number	
Area Address	
QuicNet Channel	

C + 0 + 0
C + 0 + 1
C + 0 + 2
C + 0 + 3
(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2___6_8	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	14
Manual Offset	0

C + A + 1
C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255 (minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Timing Sheet By: FLG
Approved By: FLG
Drawing Number:
Timing Implemented On: 4/4/2011

INTERSECTION: Airway Rd @ Britannia Bl

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	
7	Ped 4P	
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration

<E Page>

E + F + ROW

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	7
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

For access, set F + 9 + E = 1

Configuration

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week

8-1 Day-of-Month, Year, Month

8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program

C + C + F = version

Remote Download

C + 0 + 4 = 1 -255

w/ E + E + E bit 5 on

INTERSECTION: Airway Rd @ Britannia Bl

223 Program

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8		
9		
A		
B		
C		
D		1.8
E	---	---
F	---	---

Detector Delay & Carryover <D Page>

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row	0 Detector #
0	
1	System Det. # 1
2	System Det. # 2
3	System Det. # 3
4	System Det. # 4
5	System Det. # 5
6	System Det. # 6
7	System Det. # 7
8	System Det. # 8

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

APPENDIX B

INTERSECTION METHODOLOGY AND ANALYSIS SHEETS

SIGNALIZED INTERSECTIONS

For signalized intersections, level of service criteria are stated in terms of the average control delay per vehicle for a 15-minute analysis period. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. **Table 1** summarizes the delay thresholds for signalized intersections.

Level of service A describes operations with very low delay, (i.e. less than 10.0 seconds per vehicle). This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

Level of service B describes operations with delay in the range 10.1 seconds and 20.0 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.

TABLE 1

LEVEL OF SERVICE THRESHOLDS FOR SIGNALIZED INTERSECTIONS

AVERAGE CONTROL DELAY PER VEHICLE (SECONDS/VEHICLE)			LEVEL OF SERVICE
0.0	≤	10.0	A
10.1	to	20.0	B
21.1	to	35.0	C
35.1	to	55.0	D
55.1	to	80.0	E
	≥	80.0	F

Source: Highway Capacity Manual, 2000.

Level of service C describes operations with delay in the range 20.1 seconds and 35.0 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.

Level of service D describes operations with delay in the range 35.1 seconds and 55.0 seconds per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or higher v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are more frequent.

Level of service E describes operations with delay in the range of 55.1 seconds to 80.0 seconds per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

Level of service F describes operations with delay in excess of over 80.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with over-saturation (i.e., when arrival flow rates exceed the capacity of the intersection). It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

UNSIGNALIZED INTERSECTIONS

For unsignalized intersections, level of service is determined by the computed or measured control delay and is defined for each minor movement. Level of service is not defined for the intersection as a whole. **Table 2** depicts the criteria, which are based on the average control delay for any particular minor movement.

TABLE 2

LEVEL OF SERVICE THRESHOLDS FOR UNSIGNALIZED INTERSECTIONS

AVERAGE CONTROL DELAY PER VEHICLE (SECONDS/VEHICLE)	LEVEL OF SERVICE	EXPECTED DELAY TO MINOR STREET TRAFFIC
0.0 ≤ 10.0	A	Little or no delay
10.1 to 15.0	B	Short traffic delays
15.1 to 25.0	C	Average traffic delays
25.1 to 35.0	D	Long traffic delays
35.1 to 50.0	E	Very long traffic delays
≥ 50.0	F	Severe congestion

Source: Highway Capacity Manual, 2000.

Level of Service F exists when there are insufficient gaps of suitable size to allow a side street demand to safely cross through a major street traffic stream. This level of service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches. The method, however, is based on a constant critical gap size; that is, the critical gap remains constant no matter how long the side-street motorist waits. LOS F may also appear in the form of side-street vehicles selecting smaller-than-usual gaps. In such cases, safety may be a problem, and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior, which are more difficult to observe in the field than queuing.

APPENDIX C

CITY OF SAN DIEGO ROADWAY CLASSIFICATION TABLE

Roadway Segment LOS by Classification and Average Daily Traffic (ADT)

Table Appendix F-1 provides street classifications and associated LOS thresholds dependent on the roadway's average daily traffic (ADT).

TABLE APPENDIX F-1

ROADWAY CLASSIFICATIONS, LOS, AND AVERAGE DAILY TRAFFIC (ADT)

STREET CLASSIFICATION	LANES	LEVEL OF SERVICE				
		A	B	C	D	E
Expressway	8 lanes	40,000	56,000	80,000	93,500	107,000
Expressway	7 lanes	35,000	49,000	70,000	82,000	93,500
Expressway	6 lanes	30,000	42,000	60,000	70,000	80,000
Prime Arterial[1]	8 lanes	35,000	50,000	70,000	75,000	80,000
Prime Arterial[1]	7 lanes	30,000	42,500	60,000	65,000	70,000
Prime Arterial	6 lanes	25,000	35,000	50,000	55,000	60,000
Prime Arterial[10]	5 lanes	20,000	28,000	40,000	45,000	50,000
Prime Arterial[11]	4 lanes	17,500	24,500	35,000	40,000	45,000
Major Arterial[2]	7 lanes	22,500	31,500	45,000	50,000	55,000
Major Arterial	6 lanes	20,000	28,000	40,000	45,000	50,000
Major Arterial[3]	5 lanes	17,500	24,500	35,000	40,000	45,000
Major Arterial	4 lanes	15,000	21,000	30,000	35,000	40,000
Major Arterial	3 lanes	11,250	15,750	22,500	26,250	30,000
Major Arterial	2 lanes	7,500	10,500	15,000	17,500	20,000
Major Arterial *(one-way)*[4]	3 lanes	12,500	16,500	22,500	25,000	27,500
Major Arterial *(one-way)*[5]	2 lanes	10,000	13,000	17,500	20,000	22,500

STREET CLASSIFICATION	LANES	LEVEL OF SERVICE				
		A	B	C	D	E
Collector *(with two-way left turn lane)*	5 lanes	12,500	17,500	25,000	30,750	37,500
Collector *(with two-way left turn lane)*	4 lanes	10,000	14,000	20,000	25,000	30,000
Collector *(with two-way left turn lane)*	3 lanes	7,500	10,500	15,000	18,750	22,500
Collector *(with two-way left turn lane)*	2 lanes	5,000	7,000	10,000	13,000	15,000
Collector *(without two-way left turn lane)*	4 lanes	5,000	7,000	10,000	13,000	15,000
Collector *(without two-way left turn lane)*[6]	3 lanes	4,000	5,000	7,500	10,000	11,000
Collector *(without two-way left turn lane)*	2 lanes	2,500	3,500	5,000	6,500	8,000
Collector *(with no fronting property)*	2 lanes	4,000	5,500	7,500	9,000	10,000
Collector *(one-way)*[7]	3 lanes	11,000	14,000	19,000	22,500	26,000
Collector *(one-way)*[8]	2 lanes	7,500	9,500	12,500	15,000	17,500
Collector *(one-way)*[9]	1 lane	2,500	3,500	5,000	6,500	7,500
Sub-Collector *(Single-family)*	2 lanes	--	--	2,200	--	--

Notes:

The volumes and the average daily level of service listed above are only intended as a general planning guideline. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

[1]Calculated assuming that each additional lane above a 6-Ln Arterial adds 5,000 ADT for LOS A, 7,500 ADT for LOS B and 10,000 ADT for LOS C, D, and E

[2]Calculated assuming that ADT is 1/2 way between steps of a 6-Ln Major Arterial & 6 Ln Prime Arterial

[3]Calculated assuming that ADT is 1/2 way between steps of a 4-Ln Major Arterial & 6 Ln Major Arterial

[4]Calculated using: Capacity = 0.5 (6-Ln Major (2-way) + Added Capacity of 2,500 ADT)

[5]Calculated using: Capacity = 0.5 (4-Ln Major (2-way) + Added Capacity of 2,500 ADT)

[6]Calculated using: Capacity = 4-Ln Collector (no center lane) * (3/4)

[7]Calculated using: Capacity = 2-Ln Collector (one-way) * (3/2)

[8]Calculated using: Capacity = 0.5 (4-Ln Collector w/continuous left turn lane) + Added Capacity of 2,500 ADT)

[9]Calculated using: Capacity = 0.5 (2-Ln Collector w/ continuous left turn lane). Capacity took into account parking friction from both sides of roadway

[10] Calculated by applying same differences between 8-Ln Prime & 7-Ln Prime & 7-Ln Prime & 6-Ln Prime

[11] Calculated assuming ratio between 6-Ln Prime & 6-Ln Major applied to 4-Ln Major

APPENDIX D

EXISTING INTERSECTION LEVEL OF SERVICE WORKSHEETS

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	204	165	171	174	183	192
Future Volume (veh/h)	204	165	171	174	183	192
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	243	196	188	191	191	200
Peak Hour Factor	0.84	0.84	0.91	0.91	0.96	0.96
Percent Heavy Veh, %	16	16	16	16	16	16
Cap, veh/h	1688	1004	213	2473	1097	503
Arrive On Green	0.37	0.37	0.13	0.54	0.36	0.36
Sat Flow, veh/h	4689	1349	1584	4689	3072	1409
Grp Volume(v), veh/h	243	196	188	191	191	200
Grp Sat Flow(s),veh/h/ln	1513	1349	1584	1513	1536	1409
Q Serve(g_s), s	4.1	5.3	13.4	2.3	4.9	12.2
Cycle Q Clear(g_c), s	4.1	5.3	13.4	2.3	4.9	12.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1688	1004	213	2473	1097	503
V/C Ratio(X)	0.14	0.20	0.88	0.08	0.17	0.40
Avail Cap(c_a), veh/h	1688	1004	284	2676	1097	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	4.9	48.8	12.4	25.3	27.7
Incr Delay (d2), s/veh	0.2	0.4	17.8	0.0	0.3	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	3.8	6.1	0.7	1.8	4.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.1	5.4	66.6	12.5	25.7	30.0
LnGrp LOS	C	A	E	B	C	C
Approach Vol, veh/h	439			379	391	
Approach Delay, s/veh	15.8			39.3	27.9	
Approach LOS	B			D	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	19.9	48.7				68.6	46.3
Change Period (Y+Rc), s	4.4	6.0				6.0	5.3
Max Green Setting (Gmax), s	20.6	42.7				67.7	41.0
Max Q Clear Time (g_c+I1), s	15.4	7.3				4.3	14.2
Green Ext Time (p_c), s	0.1	3.9				2.0	0.7

Intersection Summary		
HCM 6th Ctrl Delay		27.1
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	211	1	102	272	271	0	0	257	70
Future Volume (veh/h)	0	0	0	211	1	102	272	271	0	0	257	70
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1663	1663	1663	1663	1663	0	0	1663	1663
Adj Flow Rate, veh/h				245	0	120	292	291	0	0	299	81
Peak Hour Factor				0.86	0.86	0.86	0.93	0.93	0.93	0.86	0.86	0.86
Percent Heavy Veh, %				16	16	16	16	16	0	0	16	16
Cap, veh/h				293	0	501	382	3169	0	0	1861	478
Arrive On Green				0.19	0.00	0.19	0.12	0.70	0.00	0.00	0.52	0.52
Sat Flow, veh/h				1584	0	2707	3072	4689	0	0	3730	919
Grp Volume(v), veh/h				245	0	120	292	291	0	0	250	130
Grp Sat Flow(s),veh/h/ln				1584	0	1353	1536	1513	0	0	1513	1473
Q Serve(g_s), s				13.0	0.0	3.3	8.0	1.8	0.0	0.0	3.8	4.1
Cycle Q Clear(g_c), s				13.0	0.0	3.3	8.0	1.8	0.0	0.0	3.8	4.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.62
Lane Grp Cap(c), veh/h				293	0	501	382	3169	0	0	1573	766
V/C Ratio(X)				0.84	0.00	0.24	0.76	0.09	0.00	0.00	0.16	0.17
Avail Cap(c_a), veh/h				706	0	1207	856	3169	0	0	1573	766
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.3	0.0	30.3	37.0	4.3	0.0	0.0	11.0	11.0
Incr Delay (d2), s/veh				6.2	0.0	0.2	3.2	0.1	0.0	0.0	0.2	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.1	0.0	1.0	3.0	0.4	0.0	0.0	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				40.5	0.0	30.6	40.1	4.3	0.0	0.0	11.2	11.5
LnGrp LOS				D	A	C	D	A	A	A	B	B
Approach Vol, veh/h					365			583			380	
Approach Delay, s/veh					37.2			22.3			11.3	
Approach LOS					D			C			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	66.0		15.6	50.4		21.2
Change Period (Y+Rc), s	5.1		* 4.7	5.1		5.1
Max Green Setting (Gmax), s	60.9		* 24	31.9		38.9
Max Q Clear Time (g_c+I1), s	3.8		10.0	6.1		15.0
Green Ext Time (p_c), s	2.0		0.8	2.3		1.1

Intersection Summary	
HCM 6th Ctrl Delay	23.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	1	602	0	0	0	0	363	180	76	409	0
Future Volume (veh/h)	155	1	602	0	0	0	0	363	180	76	409	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	1663	1663	0
Adj Flow Rate, veh/h	185	1	717				0	399	198	90	487	0
Peak Hour Factor	0.84	0.84	0.84				0.91	0.91	0.91	0.84	0.84	0.84
Percent Heavy Veh, %	16	16	16				0	16	16	16	16	0
Cap, veh/h	530	3	812				0	954	466	141	2547	0
Arrive On Green	0.34	0.34	0.34				0.00	0.47	0.47	0.05	0.56	0.00
Sat Flow, veh/h	1576	9	2413				0	2122	997	3072	4689	0
Grp Volume(v), veh/h	186	0	717				0	308	289	90	487	0
Grp Sat Flow(s),veh/h/ln	1584	0	1206				0	1580	1456	1536	1513	0
Q Serve(g_s), s	8.8	0.0	27.9				0.0	12.8	13.1	2.9	5.3	0.0
Cycle Q Clear(g_c), s	8.8	0.0	27.9				0.0	12.8	13.1	2.9	5.3	0.0
Prop In Lane	0.99		1.00				0.00		0.68	1.00		0.00
Lane Grp Cap(c), veh/h	533	0	812				0	739	681	141	2547	0
V/C Ratio(X)	0.35	0.00	0.88				0.00	0.42	0.42	0.64	0.19	0.00
Avail Cap(c_a), veh/h	698	0	1063				0	739	681	318	2547	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.8	0.0	31.2				0.0	17.5	17.6	46.7	10.8	0.0
Incr Delay (d2), s/veh	0.4	0.0	7.2				0.0	1.7	1.9	4.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	8.2				0.0	4.7	4.5	1.2	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	0.0	38.4				0.0	19.3	19.5	51.4	10.9	0.0
LnGrp LOS	C	A	D				A	B	B	D	B	A
Approach Vol, veh/h		903						597			577	
Approach Delay, s/veh		35.7						19.4			17.2	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.3	51.7		38.6		61.0
Change Period (Y+Rc), s	* 4.7	5.1		5.1		5.1
Max Green Setting (Gmax), s	* 10	40.9		43.9		55.9
Max Q Clear Time (g_c+I1), s	4.9	15.1		29.9		7.3
Green Ext Time (p_c), s	0.1	3.7		3.6		3.5

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	5	8	11	5	350	11	563	19	198	540	52
Future Volume (veh/h)	92	5	8	11	5	350	11	563	19	198	540	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	129	0	0	13	6	294	12	605	20	261	711	68
Peak Hour Factor	0.80	0.80	0.80	0.85	0.85	0.85	0.93	0.93	0.93	0.76	0.76	0.76
Percent Heavy Veh, %	16	16	16	16	16	16	16	16	16	16	16	16
Cap, veh/h	173	91	0	255	118	315	17	1225	40	283	933	774
Arrive On Green	0.05	0.00	0.00	0.23	0.23	0.23	0.01	0.39	0.39	0.18	0.56	0.56
Sat Flow, veh/h	3167	1663	0	1100	508	1361	1584	3116	103	1584	1663	1379
Grp Volume(v), veh/h	129	0	0	19	0	294	12	306	319	261	711	68
Grp Sat Flow(s),veh/h/ln	1584	1663	0	1608	0	1361	1584	1580	1639	1584	1663	1379
Q Serve(g_s), s	5.6	0.0	0.0	1.3	0.0	29.8	1.1	20.5	20.6	22.8	46.1	3.2
Cycle Q Clear(g_c), s	5.6	0.0	0.0	1.3	0.0	29.8	1.1	20.5	20.6	22.8	46.1	3.2
Prop In Lane	1.00		0.00	0.68		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	173	91	0	372	0	315	17	621	645	283	933	774
V/C Ratio(X)	0.75	0.00	0.00	0.05	0.00	0.93	0.71	0.49	0.49	0.92	0.76	0.09
Avail Cap(c_a), veh/h	264	138	0	398	0	337	52	621	645	432	933	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.5	0.0	0.0	42.0	0.0	53.0	69.3	32.1	32.1	56.8	23.7	14.2
Incr Delay (d2), s/veh	2.4	0.0	0.0	0.1	0.0	31.7	18.5	2.8	2.7	14.6	5.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	0.5	0.0	12.9	0.5	8.2	8.5	10.1	18.7	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	0.0	0.0	42.1	0.0	84.7	87.9	34.9	34.8	71.4	29.5	14.5
LnGrp LOS	E	A	A	D	A	F	F	C	C	E	C	B
Approach Vol, veh/h		129			313			637			1040	
Approach Delay, s/veh		67.9			82.1			35.9			39.0	
Approach LOS		E			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	60.4		13.0	5.9	84.0		37.7
Change Period (Y+Rc), s	4.4	* 5.1		5.3	4.4	5.1		5.2
Max Green Setting (Gmax), s	38.4	* 45		11.7	4.6	78.9		34.8
Max Q Clear Time (g_c+I1), s	24.8	22.6		7.6	3.1	48.1		31.8
Green Ext Time (p_c), s	0.3	4.9		0.1	0.0	7.7		0.5

Intersection Summary		
HCM 6th Ctrl Delay		46.2
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	96	0	0	106	14	0	0	0	9	0	0
Future Vol, veh/h	0	96	0	0	106	14	0	0	0	9	0	0
Conflicting Peds, #/hr	10	0	0	0	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	79	79	79	92	92	92	56	56	56
Heavy Vehicles, %	16	16	100	100	16	16	100	100	100	16	100	16
Mvmt Flow	0	120	0	0	134	18	0	0	0	16	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	162	0	0	120	0	0	273	282	130	274	264	154
Stage 1	-	-	-	-	-	-	120	120	-	144	144	-
Stage 2	-	-	-	-	-	-	153	162	-	130	120	-
Critical Hdwy	4.26	-	-	5.1	-	-	8.1	7.5	7.2	7.26	7.5	6.36
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Follow-up Hdwy	2.344	-	-	3.1	-	-	4.4	4.9	4.2	3.644	4.9	3.444
Pot Cap-1 Maneuver	1336	-	-	1031	-	-	521	492	712	651	505	856
Stage 1	-	-	-	-	-	-	694	641	-	827	624	-
Stage 2	-	-	-	-	-	-	663	611	-	841	641	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1323	-	-	1031	-	-	516	487	705	639	500	840
Mov Cap-2 Maneuver	-	-	-	-	-	-	516	487	-	639	500	-
Stage 1	-	-	-	-	-	-	694	641	-	819	618	-
Stage 2	-	-	-	-	-	-	657	605	-	833	641	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	10.8
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1323	-	-	1031	-	-	639
HCM Lane V/C Ratio	-	-	-	-	-	-	-	0.025
HCM Control Delay (s)	0	0	-	-	0	-	-	10.8
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	7.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	102	4	2	54	42	0
Future Vol, veh/h	102	4	2	54	42	0
Conflicting Peds, #/hr	10	10	0	10	10	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	55	55	44	44
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	157	6	4	98	95	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	263	73	0	0	112	0
Stage 1	63	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.56	6.36	-	-	4.26	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.444	-	-	2.344	-
Pot Cap-1 Maneuver	697	951	-	-	1395	-
Stage 1	925	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	636	933	-	-	1382	-
Mov Cap-2 Maneuver	636	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	739	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	7.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	661	1382	-
HCM Lane V/C Ratio	-	-	0.247	0.069	-
HCM Control Delay (s)	-	-	12.2	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	56	0	0	53
Future Vol, veh/h	0	0	56	0	0	53
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	16	100	100	16
Mvmt Flow	0	0	61	0	0	58

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	71	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.2	-	-	-	-
Pot Cap-1 Maneuver	0	775	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	768	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	96	0	0	106	0	0
Future Vol, veh/h	96	0	0	106	0	0
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	104	0	0	115	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	104	0	229	114
Stage 1	-	-	-	-	104	-
Stage 2	-	-	-	-	125	-
Critical Hdwy	-	-	5.1	-	7.4	7.2
Critical Hdwy Stg 1	-	-	-	-	6.4	-
Critical Hdwy Stg 2	-	-	-	-	6.4	-
Follow-up Hdwy	-	-	3.1	-	4.4	4.2
Pot Cap-1 Maneuver	-	-	1048	-	586	729
Stage 1	-	-	-	-	724	-
Stage 2	-	-	-	-	706	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1048	-	580	722
Mov Cap-2 Maneuver	-	-	-	-	580	-
Stage 1	-	-	-	-	724	-
Stage 2	-	-	-	-	699	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1048	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	96	0	0	106	0	0
Future Vol, veh/h	96	0	0	106	0	0
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	104	0	0	115	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	114
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.2
Pot Cap-1 Maneuver	-	-	0	-	0	729
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	722
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	105	0	0	120	0	0
Future Vol, veh/h	105	0	0	120	0	0
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	114	0	0	130	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	114	0	189	124
Stage 1	-	-	-	-	114	-
Stage 2	-	-	-	-	75	-
Critical Hdwy	-	-	5.6	-	8.1	7.7
Critical Hdwy Stg 1	-	-	-	-	6.9	-
Critical Hdwy Stg 2	-	-	-	-	7.3	-
Follow-up Hdwy	-	-	3.15	-	4.45	4.25
Pot Cap-1 Maneuver	-	-	1006	-	593	698
Stage 1	-	-	-	-	697	-
Stage 2	-	-	-	-	728	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1006	-	587	691
Mov Cap-2 Maneuver	-	-	-	-	587	-
Stage 1	-	-	-	-	697	-
Stage 2	-	-	-	-	721	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1006	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	105	0	0	120	0	0
Future Vol, veh/h	105	0	0	120	0	0
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	114	0	0	130	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	124
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.7
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.25
Pot Cap-1 Maneuver	-	-	0	-	0	698
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	691
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	593	559	0
Future Vol, veh/h	0	0	0	593	559	0
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	100	16	16	100
Mvmt Flow	0	0	0	645	608	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	618	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.25	-	-	-	-
Pot Cap-1 Maneuver	0	318	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	315	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	233	237	217	261	188	127
Future Volume (veh/h)	233	237	217	261	188	127
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	295	300	261	314	211	143
Peak Hour Factor	0.79	0.79	0.83	0.83	0.89	0.89
Percent Heavy Veh, %	16	16	16	16	16	16
Cap, veh/h	1599	951	285	2582	1039	476
Arrive On Green	0.35	0.35	0.18	0.57	0.34	0.34
Sat Flow, veh/h	4689	1347	1584	4689	3072	1409
Grp Volume(v), veh/h	295	300	261	314	211	143
Grp Sat Flow(s),veh/h/ln	1513	1347	1584	1513	1536	1409
Q Serve(g_s), s	5.5	10.8	19.6	3.9	5.9	9.1
Cycle Q Clear(g_c), s	5.5	10.8	19.6	3.9	5.9	9.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1599	951	285	2582	1039	476
V/C Ratio(X)	0.18	0.32	0.91	0.12	0.20	0.30
Avail Cap(c_a), veh/h	1599	951	400	2909	1039	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	7.5	48.8	12.1	28.5	29.6
Incr Delay (d2), s/veh	0.3	0.9	16.9	0.0	0.4	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.2	8.8	1.2	2.2	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.5	8.4	65.7	12.2	29.0	31.2
LnGrp LOS	C	A	E	B	C	C
Approach Vol, veh/h	595			575	354	
Approach Delay, s/veh	17.8			36.5	29.9	
Approach LOS	B			D	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	26.3	48.7				75.0	46.3
Change Period (Y+Rc), s	4.4	6.0				6.0	5.3
Max Green Setting (Gmax), s	30.6	42.7				77.7	41.0
Max Q Clear Time (g_c+I1), s	21.6	12.8				5.9	11.1
Green Ext Time (p_c), s	0.2	5.2				3.3	0.6

Intersection Summary	
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	172	0	86	632	237	0	0	264	158
Future Volume (veh/h)	0	0	0	172	0	86	632	237	0	0	264	158
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.95	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1663	1663	1663	1663	1663	0	0	1663	1663
Adj Flow Rate, veh/h				198	0	99	718	269	0	0	311	186
Peak Hour Factor				0.87	0.87	0.87	0.88	0.88	0.88	0.85	0.85	0.85
Percent Heavy Veh, %				16	16	16	16	16	0	0	16	16
Cap, veh/h				237	0	402	827	3387	0	0	1297	589
Arrive On Green				0.15	0.00	0.15	0.27	0.75	0.00	0.00	0.43	0.43
Sat Flow, veh/h				1584	0	2689	3072	4689	0	0	3176	1375
Grp Volume(v), veh/h				198	0	99	718	269	0	0	311	186
Grp Sat Flow(s),veh/h/ln				1584	0	1344	1536	1513	0	0	1513	1375
Q Serve(g_s), s				11.9	0.0	3.2	21.8	1.6	0.0	0.0	6.4	8.7
Cycle Q Clear(g_c), s				11.9	0.0	3.2	21.8	1.6	0.0	0.0	6.4	8.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				237	0	402	827	3387	0	0	1297	589
V/C Ratio(X)				0.84	0.00	0.25	0.87	0.08	0.00	0.00	0.24	0.32
Avail Cap(c_a), veh/h				436	0	740	1267	3387	0	0	1297	589
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				40.4	0.0	36.7	34.0	3.4	0.0	0.0	17.8	18.4
Incr Delay (d2), s/veh				7.6	0.0	0.3	4.3	0.0	0.0	0.0	0.4	1.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.9	0.0	1.0	8.2	0.4	0.0	0.0	2.2	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				47.9	0.0	37.0	38.3	3.4	0.0	0.0	18.2	19.9
LnGrp LOS				D	A	D	D	A	A	A	B	B
Approach Vol, veh/h					297			987			497	
Approach Delay, s/veh					44.3			28.8			18.8	
Approach LOS					D			C			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	78.0		31.0	47.0		19.7
Change Period (Y+Rc), s	5.1		* 4.7	5.1		5.1
Max Green Setting (Gmax), s	72.9		* 40	27.9		26.9
Max Q Clear Time (g_c+I1), s	3.6		23.8	10.7		13.9
Green Ext Time (p_c), s	1.9		2.5	2.8		0.8

Intersection Summary		
HCM 6th Ctrl Delay		28.6
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	1	458	0	0	0	0	731	263	121	262	0
Future Volume (veh/h)	75	1	458	0	0	0	0	731	263	121	262	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	1663	1663	0
Adj Flow Rate, veh/h	90	1	552				0	795	286	142	308	0
Peak Hour Factor	0.83	0.83	0.83				0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	16	16	16				0	16	16	16	16	0
Cap, veh/h	369	4	564				0	1278	460	197	3050	0
Arrive On Green	0.24	0.24	0.24				0.00	0.57	0.57	0.06	0.67	0.00
Sat Flow, veh/h	1567	17	2397				0	2346	813	3072	4689	0
Grp Volume(v), veh/h	91	0	552				0	555	526	142	308	0
Grp Sat Flow(s),veh/h/ln	1585	0	1198				0	1580	1496	1536	1513	0
Q Serve(g_s), s	5.1	0.0	25.2				0.0	25.9	26.0	5.0	2.6	0.0
Cycle Q Clear(g_c), s	5.1	0.0	25.2				0.0	25.9	26.0	5.0	2.6	0.0
Prop In Lane	0.99		1.00				0.00		0.54	1.00		0.00
Lane Grp Cap(c), veh/h	373	0	564				0	893	845	197	3050	0
V/C Ratio(X)	0.24	0.00	0.98				0.00	0.62	0.62	0.72	0.10	0.00
Avail Cap(c_a), veh/h	373	0	564				0	893	845	316	3050	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.1	0.0	41.8				0.0	16.0	16.0	50.5	6.4	0.0
Incr Delay (d2), s/veh	0.3	0.0	32.3				0.0	3.3	3.4	4.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	9.5				0.0	9.3	8.9	2.0	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.4	0.0	74.0				0.0	19.3	19.5	55.5	6.4	0.0
LnGrp LOS	C	A	E				A	B	B	E	A	A
Approach Vol, veh/h		643						1081			450	
Approach Delay, s/veh		68.4						19.4			21.9	
Approach LOS		E						B			C	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	11.7	67.3	31.0	79.0
Change Period (Y+Rc), s	4.7	5.1	5.1	5.1
Max Green Setting (Gmax), s	7.0	57.9	25.9	73.9
Max Q Clear Time (g_c+I1), s	7.1	28.0	27.2	4.6
Green Ext Time (p_c), s	0.1	8.2	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	34.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	9	12	17	7	143	0	401	17	273	591	76
Future Volume (veh/h)	38	9	12	17	7	143	0	401	17	273	591	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.80	1.00		0.96	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	40	28	16	20	8	170	0	508	22	284	616	79
Peak Hour Factor	0.74	0.74	0.74	0.84	0.84	0.84	0.79	0.79	0.79	0.96	0.96	0.96
Percent Heavy Veh, %	16	16	16	16	16	16	16	16	16	16	16	16
Cap, veh/h	71	40	23	190	76	223	1	1325	57	309	1100	914
Arrive On Green	0.04	0.04	0.04	0.17	0.17	0.17	0.00	0.43	0.43	0.20	0.66	0.66
Sat Flow, veh/h	1584	901	515	1147	459	1349	1584	3079	133	1584	1663	1381
Grp Volume(v), veh/h	40	0	44	28	0	170	0	260	270	284	616	79
Grp Sat Flow(s),veh/h/ln	1584	0	1416	1606	0	1349	1584	1580	1632	1584	1663	1381
Q Serve(g_s), s	3.0	0.0	3.7	1.8	0.0	14.6	0.0	13.7	13.7	21.4	24.2	2.5
Cycle Q Clear(g_c), s	3.0	0.0	3.7	1.8	0.0	14.6	0.0	13.7	13.7	21.4	24.2	2.5
Prop In Lane	1.00		0.36	0.71		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	71	0	63	265	0	223	1	680	702	309	1100	914
V/C Ratio(X)	0.56	0.00	0.69	0.11	0.00	0.76	0.00	0.38	0.38	0.92	0.56	0.09
Avail Cap(c_a), veh/h	139	0	125	459	0	386	52	680	702	555	1100	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	0.0	57.3	43.1	0.0	48.5	0.0	23.6	23.7	48.0	11.1	7.4
Incr Delay (d2), s/veh	2.6	0.0	5.0	0.2	0.0	6.8	0.0	1.6	1.6	5.8	2.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	1.4	0.7	0.0	5.3	0.0	5.3	5.5	8.7	8.5	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.5	0.0	62.3	43.4	0.0	55.3	0.0	25.3	25.3	53.8	13.1	7.6
LnGrp LOS	E	A	E	D	A	E	A	C	C	D	B	A
Approach Vol, veh/h		84			198			530			979	
Approach Delay, s/veh		61.0			53.6			25.3			24.5	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	28.2	57.4		10.7	0.0	85.6		25.3
Change Period (Y+Rc), s	4.4	* 5.1		5.3	4.4	5.1		5.2
Max Green Setting (Gmax), s	42.6	* 42		10.7	4.0	80.5		34.8
Max Q Clear Time (g_c+I1), s	23.4	15.7		5.7	0.0	26.2		16.6
Green Ext Time (p_c), s	0.4	4.2		0.1	0.0	6.9		0.9

Intersection Summary	
HCM 6th Ctrl Delay	29.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↱		↕			↕	
Traffic Vol, veh/h	0	87	0	0	37	13	0	0	0	13	0	0
Future Vol, veh/h	0	87	0	0	37	13	0	0	0	13	0	0
Conflicting Peds, #/hr	10	0	0	0	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	83	83	83	92	92	92	46	46	46
Heavy Vehicles, %	16	16	100	100	16	16	100	100	100	16	100	16
Mvmt Flow	0	116	0	0	45	16	0	0	0	28	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	71	0	0	116	0	0	179	187	126	181	171	65
Stage 1	-	-	-	-	-	-	116	116	-	55	55	-
Stage 2	-	-	-	-	-	-	63	71	-	126	116	-
Critical Hdwy	4.26	-	-	5.1	-	-	8.1	7.5	7.2	7.26	7.5	6.36
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Follow-up Hdwy	2.344	-	-	3.1	-	-	4.4	4.9	4.2	3.644	4.9	3.444
Pot Cap-1 Maneuver	1445	-	-	1035	-	-	609	564	716	751	577	961
Stage 1	-	-	-	-	-	-	698	644	-	923	690	-
Stage 2	-	-	-	-	-	-	751	678	-	845	644	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1431	-	-	1035	-	-	603	558	709	737	571	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	603	558	-	737	571	-
Stage 1	-	-	-	-	-	-	698	644	-	914	683	-
Stage 2	-	-	-	-	-	-	744	671	-	837	644	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	10.1
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1431	-	-	1035	-	-	737
HCM Lane V/C Ratio	-	-	-	-	-	-	-	0.038
HCM Control Delay (s)	0	0	-	-	0	-	-	10.1
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	6.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	0	0	51	36	0
Future Vol, veh/h	70	0	0	51	36	0
Conflicting Peds, #/hr	10	10	0	10	10	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	70	70	63	63
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	93	0	0	73	57	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	171	57	0	0	83	0
Stage 1	47	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.56	6.36	-	-	4.26	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.444	-	-	2.344	-
Pot Cap-1 Maneuver	788	971	-	-	1430	-
Stage 1	941	-	-	-	-	-
Stage 2	868	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	742	953	-	-	1416	-
Mov Cap-2 Maneuver	742	-	-	-	-	-
Stage 1	932	-	-	-	-	-
Stage 2	825	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	7.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	742	1416	-
HCM Lane V/C Ratio	-	-	0.126	0.04	-
HCM Control Delay (s)	-	-	10.5	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	51	0	0	24
Future Vol, veh/h	0	0	51	0	0	24
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	16	100	100	16
Mvmt Flow	0	0	55	0	0	26

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	65	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.2	-	-	-	-
Pot Cap-1 Maneuver	0	782	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	775	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	87	0	0	70	0	0
Future Vol, veh/h	87	0	0	70	0	0
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	95	0	0	76	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	95	0	181	105
Stage 1	-	-	-	-	95	-
Stage 2	-	-	-	-	86	-
Critical Hdwy	-	-	5.1	-	7.4	7.2
Critical Hdwy Stg 1	-	-	-	-	6.4	-
Critical Hdwy Stg 2	-	-	-	-	6.4	-
Follow-up Hdwy	-	-	3.1	-	4.4	4.2
Pot Cap-1 Maneuver	-	-	1057	-	629	738
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	740	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1057	-	623	731
Mov Cap-2 Maneuver	-	-	-	-	623	-
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	733	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1057	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	87	0	0	70	0	0
Future Vol, veh/h	87	0	0	70	0	0
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	95	0	0	76	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	105
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.2
Pot Cap-1 Maneuver	-	-	0	-	0	738
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	731
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	100	0	0	83	0	0
Future Vol, veh/h	100	0	0	83	0	0
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	109	0	0	90	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	109	0	164	119
Stage 1	-	-	-	-	109	-
Stage 2	-	-	-	-	55	-
Critical Hdwy	-	-	5.6	-	8.1	7.7
Critical Hdwy Stg 1	-	-	-	-	6.9	-
Critical Hdwy Stg 2	-	-	-	-	7.3	-
Follow-up Hdwy	-	-	3.15	-	4.45	4.25
Pot Cap-1 Maneuver	-	-	1011	-	618	704
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	748	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1011	-	612	697
Mov Cap-2 Maneuver	-	-	-	-	612	-
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	741	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1011	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	100	0	0	83	0	0
Future Vol, veh/h	100	0	0	83	0	0
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	109	0	0	90	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	119
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.7
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.25
Pot Cap-1 Maneuver	-	-	0	-	0	704
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	697
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	418	620	0
Future Vol, veh/h	0	0	0	418	620	0
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	100	16	16	100
Mvmt Flow	0	0	0	454	674	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	684	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.25	-	-	-	-
Pot Cap-1 Maneuver	0	286	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	283	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

APPENDIX E

EXISTING + PROJECT INTERSECTION LEVEL OF SERVICE WORKSHEETS

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	204	176	184	174	188	197
Future Volume (veh/h)	204	176	184	174	188	197
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	243	210	202	191	196	205
Peak Hour Factor	0.84	0.84	0.91	0.91	0.96	0.96
Percent Heavy Veh, %	16	16	16	16	16	16
Cap, veh/h	1671	994	227	2493	1086	498
Arrive On Green	0.37	0.37	0.14	0.55	0.35	0.35
Sat Flow, veh/h	4689	1348	1584	4689	3072	1409
Grp Volume(v), veh/h	243	210	202	191	196	205
Grp Sat Flow(s),veh/h/ln	1513	1348	1584	1513	1536	1409
Q Serve(g_s), s	4.1	6.0	14.5	2.3	5.1	12.8
Cycle Q Clear(g_c), s	4.1	6.0	14.5	2.3	5.1	12.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1671	994	227	2493	1086	498
V/C Ratio(X)	0.15	0.21	0.89	0.08	0.18	0.41
Avail Cap(c_a), veh/h	1671	994	281	2649	1086	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	5.3	48.8	12.3	25.9	28.4
Incr Delay (d2), s/veh	0.2	0.5	21.7	0.0	0.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	4.3	6.9	0.7	1.9	4.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.7	5.8	70.5	12.3	26.3	30.9
LnGrp LOS	C	A	E	B	C	C
Approach Vol, veh/h	453			393	401	
Approach Delay, s/veh	15.9			42.2	28.6	
Approach LOS	B			D	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	21.0	48.7				69.7	46.3
Change Period (Y+Rc), s	4.4	6.0				6.0	5.3
Max Green Setting (Gmax), s	20.6	42.7				67.7	41.0
Max Q Clear Time (g_c+I1), s	16.5	8.0				4.3	14.8
Green Ext Time (p_c), s	0.1	4.0				2.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	28.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	218	1	102	304	281	0	0	281	70
Future Volume (veh/h)	0	0	0	218	1	102	304	281	0	0	281	70
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1663	1663	1663	1663	1663	0	0	1663	1663
Adj Flow Rate, veh/h				253	0	120	327	302	0	0	327	81
Peak Hour Factor				0.86	0.86	0.86	0.93	0.93	0.93	0.86	0.86	0.86
Percent Heavy Veh, %				16	16	16	16	16	0	0	16	16
Cap, veh/h				301	0	515	420	3150	0	0	1838	434
Arrive On Green				0.19	0.00	0.19	0.14	0.69	0.00	0.00	0.50	0.50
Sat Flow, veh/h				1584	0	2709	3072	4689	0	0	3799	862
Grp Volume(v), veh/h				253	0	120	327	302	0	0	269	139
Grp Sat Flow(s),veh/h/ln				1584	0	1354	1536	1513	0	0	1513	1485
Q Serve(g_s), s				13.5	0.0	3.3	9.0	1.9	0.0	0.0	4.2	4.5
Cycle Q Clear(g_c), s				13.5	0.0	3.3	9.0	1.9	0.0	0.0	4.2	4.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.58
Lane Grp Cap(c), veh/h				301	0	515	420	3150	0	0	1524	748
V/C Ratio(X)				0.84	0.00	0.23	0.78	0.10	0.00	0.00	0.18	0.19
Avail Cap(c_a), veh/h				702	0	1201	886	3150	0	0	1524	748
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.3	0.0	30.1	36.6	4.4	0.0	0.0	11.9	11.9
Incr Delay (d2), s/veh				6.3	0.0	0.2	3.2	0.1	0.0	0.0	0.3	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.3	0.0	1.0	3.4	0.5	0.0	0.0	1.3	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				40.6	0.0	30.4	39.8	4.5	0.0	0.0	12.1	12.5
LnGrp LOS				D	A	C	D	A	A	A	B	B
Approach Vol, veh/h					373			629			408	
Approach Delay, s/veh					37.3			22.8			12.2	
Approach LOS					D			C			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	66.0		16.7	49.3		21.8
Change Period (Y+Rc), s	5.1		* 4.7	5.1		5.1
Max Green Setting (Gmax), s	60.9		* 25	30.9		38.9
Max Q Clear Time (g_c+I1), s	3.9		11.0	6.5		15.5
Green Ext Time (p_c), s	2.1		1.0	2.5		1.2

Intersection Summary	
HCM 6th Ctrl Delay	23.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	1	679	0	0	0	0	405	183	76	440	0
Future Volume (veh/h)	155	1	679	0	0	0	0	405	183	76	440	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	1663	1663	0
Adj Flow Rate, veh/h	185	1	808				0	445	201	90	524	0
Peak Hour Factor	0.84	0.84	0.84				0.91	0.91	0.91	0.84	0.84	0.84
Percent Heavy Veh, %	16	16	16				0	16	16	16	16	0
Cap, veh/h	585	3	897				0	920	412	139	2399	0
Arrive On Green	0.37	0.37	0.37				0.00	0.44	0.44	0.05	0.53	0.00
Sat Flow, veh/h	1576	9	2416				0	2188	941	3072	4689	0
Grp Volume(v), veh/h	186	0	808				0	333	313	90	524	0
Grp Sat Flow(s),veh/h/ln	1584	0	1208				0	1580	1466	1536	1513	0
Q Serve(g_s), s	8.5	0.0	32.2				0.0	15.3	15.6	2.9	6.3	0.0
Cycle Q Clear(g_c), s	8.5	0.0	32.2				0.0	15.3	15.6	2.9	6.3	0.0
Prop In Lane	0.99		1.00				0.00		0.64	1.00		0.00
Lane Grp Cap(c), veh/h	588	0	897				0	691	641	139	2399	0
V/C Ratio(X)	0.32	0.00	0.90				0.00	0.48	0.49	0.65	0.22	0.00
Avail Cap(c_a), veh/h	713	0	1088				0	691	641	253	2399	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.8	0.0	30.3				0.0	20.5	20.5	47.9	12.8	0.0
Incr Delay (d2), s/veh	0.3	0.0	9.0				0.0	2.4	2.6	5.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	9.6				0.0	5.8	5.5	1.2	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.1	0.0	39.3				0.0	22.9	23.2	52.9	13.0	0.0
LnGrp LOS	C	A	D				A	C	C	D	B	A
Approach Vol, veh/h		994						646			614	
Approach Delay, s/veh		36.3						23.0			18.9	
Approach LOS		D						C			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	9.3	49.7	43.0	59.0
Change Period (Y+Rc), s	4.7	5.1	5.1	5.1
Max Green Setting (Gmax), s	8.4	40.8	45.9	53.9
Max Q Clear Time (g_c+I1), s	10.5	17.6	34.2	8.3
Green Ext Time (p_c), s	0.1	4.0	3.7	3.8

Intersection Summary	
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	6	8	12	7	350	11	563	19	198	584	116
Future Volume (veh/h)	135	6	8	12	7	350	11	563	19	198	584	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	184	0	0	14	8	294	12	605	20	261	768	153
Peak Hour Factor	0.80	0.80	0.80	0.85	0.85	0.85	0.93	0.93	0.93	0.76	0.76	0.76
Percent Heavy Veh, %	16	16	16	16	16	16	16	16	16	16	16	16
Cap, veh/h	227	119	0	235	134	312	17	1191	39	282	914	758
Arrive On Green	0.07	0.00	0.00	0.23	0.23	0.23	0.01	0.38	0.38	0.18	0.55	0.55
Sat Flow, veh/h	3167	1663	0	1026	586	1361	1584	3116	103	1584	1663	1379
Grp Volume(v), veh/h	184	0	0	22	0	294	12	306	319	261	768	153
Grp Sat Flow(s),veh/h/ln	1584	1663	0	1612	0	1361	1584	1580	1639	1584	1663	1379
Q Serve(g_s), s	8.3	0.0	0.0	1.5	0.0	30.6	1.1	21.4	21.5	23.4	55.7	8.1
Cycle Q Clear(g_c), s	8.3	0.0	0.0	1.5	0.0	30.6	1.1	21.4	21.5	23.4	55.7	8.1
Prop In Lane	1.00		0.00	0.64		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	227	119	0	370	0	312	17	604	627	282	914	758
V/C Ratio(X)	0.81	0.00	0.00	0.06	0.00	0.94	0.72	0.51	0.51	0.93	0.84	0.20
Avail Cap(c_a), veh/h	279	146	0	380	0	321	44	604	627	422	914	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.0	0.0	0.0	43.4	0.0	54.6	71.1	34.1	34.2	58.3	27.2	16.4
Incr Delay (d2), s/veh	11.2	0.0	0.0	0.1	0.0	35.2	18.9	3.0	2.9	16.0	9.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	0.0	0.6	0.0	13.5	0.5	8.6	9.0	10.5	23.3	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.2	0.0	0.0	43.5	0.0	89.8	90.0	37.2	37.1	74.3	36.3	17.0
LnGrp LOS	E	A	A	D	A	F	F	D	D	E	D	B
Approach Vol, veh/h		184			316			637			1182	
Approach Delay, s/veh		77.2			86.6			38.1			42.2	
Approach LOS		E			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.1	60.2		15.6	5.9	84.4		38.3
Change Period (Y+Rc), s	4.4	* 5.1		5.3	4.4	5.1		5.2
Max Green Setting (Gmax), s	25.4	* 45		12.7	4.0	79.3		34.0
Max Q Clear Time (g_c+I1), s	25.4	23.5		10.3	3.1	57.7		32.6
Green Ext Time (p_c), s	0.3	4.8		0.1	0.0	8.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	49.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↰	↗		↕			↕	
Traffic Vol, veh/h	0	115	0	24	126	14	0	0	10	9	0	0
Future Vol, veh/h	0	115	0	24	126	14	0	0	10	9	0	0
Conflicting Peds, #/hr	10	0	0	0	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	79	79	79	92	92	92	56	56	56
Heavy Vehicles, %	16	16	100	100	16	16	100	100	100	16	100	16
Mvmt Flow	0	144	0	30	159	18	0	0	11	16	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	187	0	0	144	0	0	382	391	154	389	373	179
Stage 1	-	-	-	-	-	-	144	144	-	229	229	-
Stage 2	-	-	-	-	-	-	238	247	-	160	144	-
Critical Hdwy	4.26	-	-	5.1	-	-	8.1	7.5	7.2	7.26	7.5	6.36
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Follow-up Hdwy	2.344	-	-	3.1	-	-	4.4	4.9	4.2	3.644	4.9	3.444
Pot Cap-1 Maneuver	1307	-	-	1007	-	-	434	420	688	545	431	829
Stage 1	-	-	-	-	-	-	672	624	-	743	566	-
Stage 2	-	-	-	-	-	-	590	554	-	810	624	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1295	-	-	1007	-	-	419	402	681	513	412	813
Mov Cap-2 Maneuver	-	-	-	-	-	-	419	402	-	513	412	-
Stage 1	-	-	-	-	-	-	672	624	-	736	542	-
Stage 2	-	-	-	-	-	-	565	530	-	789	624	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.3	10.4	12.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	681	1295	-	-	1007	-	-	513
HCM Lane V/C Ratio	0.016	-	-	-	0.03	-	-	0.031
HCM Control Delay (s)	10.4	0	-	-	8.7	0	-	12.2
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	7.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	102	4	2	71	42	0
Future Vol, veh/h	102	4	2	71	42	0
Conflicting Peds, #/hr	10	10	0	10	10	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	55	55	44	44
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	157	6	4	129	95	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	279	89	0	0	143	0
Stage 1	79	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.56	6.36	-	-	4.26	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.444	-	-	2.344	-
Pot Cap-1 Maneuver	682	932	-	-	1358	-
Stage 1	910	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	621	914	-	-	1345	-
Mov Cap-2 Maneuver	621	-	-	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	737	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	7.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	645	1345	-
HCM Lane V/C Ratio	-	-	0.253	0.071	-
HCM Control Delay (s)	-	-	12.5	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	8	65	19	0	53
Future Vol, veh/h	0	8	65	19	0	53
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	16	100	100	16
Mvmt Flow	0	9	71	21	0	58

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	92	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.2	-	-	-	-
Pot Cap-1 Maneuver	0	752	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	745	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	745	-
HCM Lane V/C Ratio	-	-	0.012	-
HCM Control Delay (s)	-	-	9.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	113	0	20	106	0	8
Future Vol, veh/h	113	0	20	106	0	8
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	123	0	22	115	0	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	123	0	292	133
Stage 1	-	-	-	-	123	-
Stage 2	-	-	-	-	169	-
Critical Hdwy	-	-	5.1	-	7.4	7.2
Critical Hdwy Stg 1	-	-	-	-	6.4	-
Critical Hdwy Stg 2	-	-	-	-	6.4	-
Follow-up Hdwy	-	-	3.1	-	4.4	4.2
Pot Cap-1 Maneuver	-	-	1028	-	534	709
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	671	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1028	-	516	702
Mov Cap-2 Maneuver	-	-	-	-	516	-
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	650	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	702	-	-	1028	-
HCM Lane V/C Ratio	0.012	-	-	0.021	-
HCM Control Delay (s)	10.2	-	-	8.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	111	10	0	126	0	4
Future Vol, veh/h	111	10	0	126	0	4
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	121	11	0	137	0	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	137
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.2
Pot Cap-1 Maneuver	-	-	0	-	0	705
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	698
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	698	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-
HCM Control Delay (s)	10.2	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	134	0	22	164	0	9
Future Vol, veh/h	134	0	22	164	0	9
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	146	0	24	178	0	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	146	0	293	156
Stage 1	-	-	-	-	146	-
Stage 2	-	-	-	-	147	-
Critical Hdwy	-	-	5.6	-	8.1	7.7
Critical Hdwy Stg 1	-	-	-	-	6.9	-
Critical Hdwy Stg 2	-	-	-	-	7.3	-
Follow-up Hdwy	-	-	3.15	-	4.45	4.25
Pot Cap-1 Maneuver	-	-	970	-	499	664
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	657	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	970	-	481	658
Mov Cap-2 Maneuver	-	-	-	-	481	-
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	633	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	10.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	658	-	-	970	-
HCM Lane V/C Ratio	0.015	-	-	0.025	-
HCM Control Delay (s)	10.6	-	-	8.8	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	143	0	0	186	0	6
Future Vol, veh/h	143	0	0	186	0	6
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	155	0	0	202	0	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	165
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.7
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.25
Pot Cap-1 Maneuver	-	-	0	-	0	655
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	649
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	649	-	-	-
HCM Lane V/C Ratio	0.01	-	-	-
HCM Control Delay (s)	10.6	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	593	588	16
Future Vol, veh/h	0	0	0	593	588	16
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	100	16	16	100
Mvmt Flow	0	0	0	645	639	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	658	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.25	-	-	-	-
Pot Cap-1 Maneuver	0	298	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	295	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	233	242	225	261	198	139
Future Volume (veh/h)	233	242	225	261	198	139
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	295	306	271	314	222	156
Peak Hour Factor	0.79	0.79	0.83	0.83	0.89	0.89
Percent Heavy Veh, %	16	16	16	16	16	16
Cap, veh/h	1587	944	295	2596	1031	473
Arrive On Green	0.35	0.35	0.19	0.57	0.34	0.34
Sat Flow, veh/h	4689	1347	1584	4689	3072	1409
Grp Volume(v), veh/h	295	306	271	314	222	156
Grp Sat Flow(s),veh/h/ln	1513	1347	1584	1513	1536	1409
Q Serve(g_s), s	5.5	11.3	20.5	3.9	6.3	10.1
Cycle Q Clear(g_c), s	5.5	11.3	20.5	3.9	6.3	10.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1587	944	295	2596	1031	473
V/C Ratio(X)	0.19	0.32	0.92	0.12	0.22	0.33
Avail Cap(c_a), veh/h	1587	944	397	2887	1031	473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	7.8	48.8	12.0	29.1	30.3
Incr Delay (d2), s/veh	0.3	0.9	18.9	0.0	0.5	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	7.5	9.3	1.2	2.4	3.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.9	8.7	67.7	12.1	29.5	32.2
LnGrp LOS	C	A	E	B	C	C
Approach Vol, veh/h	601			585	378	
Approach Delay, s/veh	18.1			37.8	30.6	
Approach LOS	B			D	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	27.2	48.7				75.9	46.3
Change Period (Y+Rc), s	4.4	6.0				6.0	5.3
Max Green Setting (Gmax), s	30.6	42.7				77.7	41.0
Max Q Clear Time (g_c+I1), s	22.5	13.3				5.9	12.1
Green Ext Time (p_c), s	0.2	5.2				3.3	0.7

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	176	0	86	703	259	0	0	277	158
Future Volume (veh/h)	0	0	0	176	0	86	703	259	0	0	277	158
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.95	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1663	1663	1663	1663	1663	0	0	1663	1663
Adj Flow Rate, veh/h				202	0	99	799	294	0	0	326	186
Peak Hour Factor				0.87	0.87	0.87	0.88	0.88	0.88	0.85	0.85	0.85
Percent Heavy Veh, %				16	16	16	16	16	0	0	16	16
Cap, veh/h				240	0	408	910	3385	0	0	1216	552
Arrive On Green				0.15	0.00	0.15	0.30	0.75	0.00	0.00	0.40	0.40
Sat Flow, veh/h				1584	0	2690	3072	4689	0	0	3176	1374
Grp Volume(v), veh/h				202	0	99	799	294	0	0	326	186
Grp Sat Flow(s),veh/h/ln				1584	0	1345	1536	1513	0	0	1513	1374
Q Serve(g_s), s				12.3	0.0	3.2	24.5	1.7	0.0	0.0	7.2	9.3
Cycle Q Clear(g_c), s				12.3	0.0	3.2	24.5	1.7	0.0	0.0	7.2	9.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				240	0	408	910	3385	0	0	1216	552
V/C Ratio(X)				0.84	0.00	0.24	0.88	0.09	0.00	0.00	0.27	0.34
Avail Cap(c_a), veh/h				414	0	703	1311	3385	0	0	1216	552
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				40.9	0.0	37.0	33.2	3.4	0.0	0.0	19.9	20.5
Incr Delay (d2), s/veh				7.8	0.0	0.3	5.0	0.1	0.0	0.0	0.5	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.0	0.0	1.0	9.3	0.4	0.0	0.0	2.5	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				48.7	0.0	37.3	38.2	3.5	0.0	0.0	20.4	22.1
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					301			1093			512	
Approach Delay, s/veh					44.9			28.9			21.0	
Approach LOS					D			C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	79.0		34.1	44.9		20.1
Change Period (Y+Rc), s	5.1		* 4.7	5.1		5.1
Max Green Setting (Gmax), s	73.9		* 42	26.9		25.9
Max Q Clear Time (g_c+I1), s	3.7		26.5	11.3		14.3
Green Ext Time (p_c), s	2.1		2.8	2.8		0.7

Intersection Summary	
HCM 6th Ctrl Delay	29.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	1	501	0	0	0	0	824	270	121	279	0
Future Volume (veh/h)	75	1	501	0	0	0	0	824	270	121	279	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	1663	1663	0
Adj Flow Rate, veh/h	90	1	604				0	896	293	142	328	0
Peak Hour Factor	0.83	0.83	0.83				0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	16	16	16				0	16	16	16	16	0
Cap, veh/h	369	4	564				0	1316	429	196	3050	0
Arrive On Green	0.24	0.24	0.24				0.00	0.57	0.57	0.06	0.67	0.00
Sat Flow, veh/h	1567	17	2397				0	2411	759	3072	4689	0
Grp Volume(v), veh/h	91	0	604				0	607	582	142	328	0
Grp Sat Flow(s),veh/h/ln	1585	0	1198				0	1580	1507	1536	1513	0
Q Serve(g_s), s	5.1	0.0	25.9				0.0	29.8	30.1	5.0	2.8	0.0
Cycle Q Clear(g_c), s	5.1	0.0	25.9				0.0	29.8	30.1	5.0	2.8	0.0
Prop In Lane	0.99		1.00				0.00		0.50	1.00		0.00
Lane Grp Cap(c), veh/h	373	0	564				0	893	852	196	3050	0
V/C Ratio(X)	0.24	0.00	1.07				0.00	0.68	0.68	0.72	0.11	0.00
Avail Cap(c_a), veh/h	373	0	564				0	893	852	288	3050	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.1	0.0	42.1				0.0	16.9	16.9	50.5	6.4	0.0
Incr Delay (d2), s/veh	0.3	0.0	58.1				0.0	4.2	4.4	5.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	11.8				0.0	10.8	10.5	2.0	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.4	0.0	100.2				0.0	21.0	21.3	55.6	6.5	0.0
LnGrp LOS	C	A	F				A	C	C	E	A	A
Approach Vol, veh/h		695						1189			470	
Approach Delay, s/veh		91.6						21.2			21.3	
Approach LOS		F						C			C	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	11.7	67.3	31.0	79.0
Change Period (Y+Rc), s	4.7	5.1	5.1	5.1
Max Green Setting (Gmax), s	7.0	58.9	25.9	73.9
Max Q Clear Time (g_c+I1), s	7.1	32.1	27.9	4.8
Green Ext Time (p_c), s	0.1	9.0	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	42.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	12	12	18	8	143	0	401	17	273	615	112
Future Volume (veh/h)	137	12	12	18	8	143	0	401	17	273	615	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	211	0	0	21	10	170	0	508	22	284	641	117
Peak Hour Factor	0.74	0.74	0.74	0.84	0.84	0.84	0.79	0.79	0.79	0.96	0.96	0.96
Percent Heavy Veh, %	16	16	16	16	16	16	16	16	16	16	16	16
Cap, veh/h	266	140	0	181	86	224	1	1194	52	310	1031	856
Arrive On Green	0.08	0.00	0.00	0.17	0.17	0.17	0.00	0.39	0.39	0.20	0.62	0.62
Sat Flow, veh/h	3167	1663	0	1090	519	1349	1584	3079	133	1584	1663	1381
Grp Volume(v), veh/h	211	0	0	31	0	170	0	260	270	284	641	117
Grp Sat Flow(s),veh/h/ln	1584	1663	0	1608	0	1349	1584	1580	1632	1584	1663	1381
Q Serve(g_s), s	7.8	0.0	0.0	2.0	0.0	14.4	0.0	14.5	14.5	21.1	28.6	4.2
Cycle Q Clear(g_c), s	7.8	0.0	0.0	2.0	0.0	14.4	0.0	14.5	14.5	21.1	28.6	4.2
Prop In Lane	1.00		0.00	0.68		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	266	140	0	267	0	224	1	612	633	310	1031	856
V/C Ratio(X)	0.79	0.00	0.00	0.12	0.00	0.76	0.00	0.42	0.43	0.92	0.62	0.14
Avail Cap(c_a), veh/h	468	246	0	456	0	383	53	612	633	546	1031	856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	0.0	0.0	42.5	0.0	47.7	0.0	26.9	26.9	47.3	14.1	9.5
Incr Delay (d2), s/veh	2.0	0.0	0.0	0.2	0.0	6.7	0.0	2.2	2.1	6.4	2.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	0.0	0.8	0.0	5.2	0.0	5.7	5.9	8.7	10.5	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.9	0.0	0.0	42.8	0.0	54.4	0.0	29.1	29.0	53.7	16.9	9.8
LnGrp LOS	E	A	A	D	A	D	A	C	C	D	B	A
Approach Vol, veh/h		211			201			530			1042	
Approach Delay, s/veh		55.9			52.6			29.0			26.1	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	27.8	51.6		15.4	0.0	79.4		25.1
Change Period (Y+Rc), s	4.4	* 5.1		5.3	4.4	5.1		5.2
Max Green Setting (Gmax), s	41.3	* 37		17.7	4.0	74.3		34.0
Max Q Clear Time (g_c+I2), s	23.1	16.5		9.8	0.0	30.6		16.4
Green Ext Time (p_c), s	0.4	3.9		0.2	0.0	7.4		0.9

Intersection Summary	
HCM 6th Ctrl Delay	32.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↰	↗		↕			↕	
Traffic Vol, veh/h	0	131	0	13	48	13	0	0	23	13	0	0
Future Vol, veh/h	0	131	0	13	48	13	0	0	23	13	0	0
Conflicting Peds, #/hr	10	0	0	0	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	83	83	83	92	92	92	46	46	46
Heavy Vehicles, %	16	16	100	100	16	16	100	100	100	16	100	16
Mvmt Flow	0	175	0	16	58	16	0	0	25	28	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	84	0	0	175	0	0	283	291	185	298	275	78
Stage 1	-	-	-	-	-	-	175	175	-	100	100	-
Stage 2	-	-	-	-	-	-	108	116	-	198	175	-
Critical Hdwy	4.26	-	-	5.1	-	-	8.1	7.5	7.2	7.26	7.5	6.36
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Follow-up Hdwy	2.344	-	-	3.1	-	-	4.4	4.9	4.2	3.644	4.9	3.444
Pot Cap-1 Maneuver	1429	-	-	976	-	-	512	485	658	627	497	945
Stage 1	-	-	-	-	-	-	644	602	-	873	656	-
Stage 2	-	-	-	-	-	-	706	644	-	773	602	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1415	-	-	976	-	-	501	472	652	584	484	927
Mov Cap-2 Maneuver	-	-	-	-	-	-	501	472	-	584	484	-
Stage 1	-	-	-	-	-	-	644	602	-	864	638	-
Stage 2	-	-	-	-	-	-	687	627	-	736	602	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.5	10.7	11.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	652	1415	-	-	976	-	-	584
HCM Lane V/C Ratio	0.038	-	-	-	0.016	-	-	0.048
HCM Control Delay (s)	10.7	0	-	-	8.7	0	-	11.5
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	5.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	0	0	74	36	0
Future Vol, veh/h	70	0	0	74	36	0
Conflicting Peds, #/hr	10	10	0	10	10	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	70	70	63	63
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	93	0	0	106	57	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	187	73	0	0	116	0
Stage 1	63	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.56	6.36	-	-	4.26	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.444	-	-	2.344	-
Pot Cap-1 Maneuver	771	951	-	-	1390	-
Stage 1	925	-	-	-	-	-
Stage 2	868	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	725	933	-	-	1377	-
Mov Cap-2 Maneuver	725	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	825	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	7.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	725	1377	-
HCM Lane V/C Ratio	-	-	0.129	0.041	-
HCM Control Delay (s)	-	-	10.7	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	17	57	11	0	24
Future Vol, veh/h	0	17	57	11	0	24
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	16	100	100	16
Mvmt Flow	0	18	62	12	0	26

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	78	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.2	-	-	-	-
Pot Cap-1 Maneuver	0	767	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	760	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	760	-
HCM Lane V/C Ratio	-	-	0.024	-
HCM Control Delay (s)	-	-	9.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	110	0	11	70	0	18
Future Vol, veh/h	110	0	11	70	0	18
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	120	0	12	76	0	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	120	0	230	130
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	110	-
Critical Hdwy	-	-	5.1	-	7.4	7.2
Critical Hdwy Stg 1	-	-	-	-	6.4	-
Critical Hdwy Stg 2	-	-	-	-	6.4	-
Follow-up Hdwy	-	-	3.1	-	4.4	4.2
Pot Cap-1 Maneuver	-	-	1031	-	585	712
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	719	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1031	-	572	705
Mov Cap-2 Maneuver	-	-	-	-	572	-
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	704	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	705	-	-	1031	-
HCM Lane V/C Ratio	0.028	-	-	0.012	-
HCM Control Delay (s)	10.3	-	-	8.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	122	6	0	81	0	9
Future Vol, veh/h	122	6	0	81	0	9
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	133	7	0	88	0	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	147
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.2
Pot Cap-1 Maneuver	-	-	0	-	0	695
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	688
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	688	-	-	-
HCM Lane V/C Ratio	0.014	-	-	-
HCM Control Delay (s)	10.3	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	167	0	13	107	0	21
Future Vol, veh/h	167	0	13	107	0	21
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	182	0	14	116	0	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	182	0	278	192
Stage 1	-	-	-	-	182	-
Stage 2	-	-	-	-	96	-
Critical Hdwy	-	-	5.6	-	8.1	7.7
Critical Hdwy Stg 1	-	-	-	-	6.9	-
Critical Hdwy Stg 2	-	-	-	-	7.3	-
Follow-up Hdwy	-	-	3.15	-	4.45	4.25
Pot Cap-1 Maneuver	-	-	931	-	511	628
Stage 1	-	-	-	-	637	-
Stage 2	-	-	-	-	706	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	931	-	498	622
Mov Cap-2 Maneuver	-	-	-	-	498	-
Stage 1	-	-	-	-	637	-
Stage 2	-	-	-	-	688	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	11
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	622	-	-	931	-
HCM Lane V/C Ratio	0.037	-	-	0.015	-
HCM Control Delay (s)	11	-	-	8.9	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	188	0	0	120	0	14
Future Vol, veh/h	188	0	0	120	0	14
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	204	0	0	130	0	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	214
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.7
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.25
Pot Cap-1 Maneuver	-	-	0	-	0	607
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	601
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	601	-	-	-
HCM Lane V/C Ratio	0.025	-	-	-
HCM Control Delay (s)	11.1	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	418	636	9
Future Vol, veh/h	0	0	0	418	636	9
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	100	16	16	100
Mvmt Flow	0	0	0	454	691	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	706	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.25	-	-	-	-
Pot Cap-1 Maneuver	0	276	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	273	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

APPENDIX F

CUMULATIVE PROJECTS INFORMATION

TABLE 6.1
CUMULATIVE PROJECTS TRIP GENERATION

Cumulative Project	Land Use	Daily Trips	AM Peak Hour (In / Out)	PM Peak Hour (In / Out)
1. 7-Eleven [1]	Convenience Store	1,800	144 (72-in / 72-out)	144 (72-in / 72-out)
2. Azul Playa Del Sol/Luna (California Terraces PA 6) [2]	Residential	4,440	356 (71-in / 285-out)	400 (280-in / 120-out)
3. Cesar Solis Park [3]	Park	750	30 (0-in / 30-out)	60 (0-in / 60-out)
4. Candlelight [4]	Residential	2,850	228 (46-in / 182-out)	257 (180-in / 77-out)
5. Southview [5]	Residential	1,662	133 (27-in / 106-out)	299 (105-in / 194-out)
6. Southview East [6]	Residential	816	65 (13-in / 52-out)	220 (51-in / 169-out)
7. Southwind [7]	Residential	800	64 (13-in / 51-out)	80 (56-in / 24-out)
8. Handler Retail Center [6]	Motel	1,701	136 (54-in / 82-out)	153 (61-in / 92-out)
	Restaurant (sit down high turnover)	3,120	250 (125-in / 125-out)	250 (150-in / 100-out)
	Fast food (with drive-through)	4,200	168 (101-in / 67-out)	336 (168-in / 168-out)
9. Arco #5770 [9]	Gas Station	60	4 (2-in / 2-out)	4 (2-in / 2-out)
10. Marijuana Production Facility [10]	Marijuana Facility	346	69 (62-in / 7-out)	69 (14-in / 55-out)

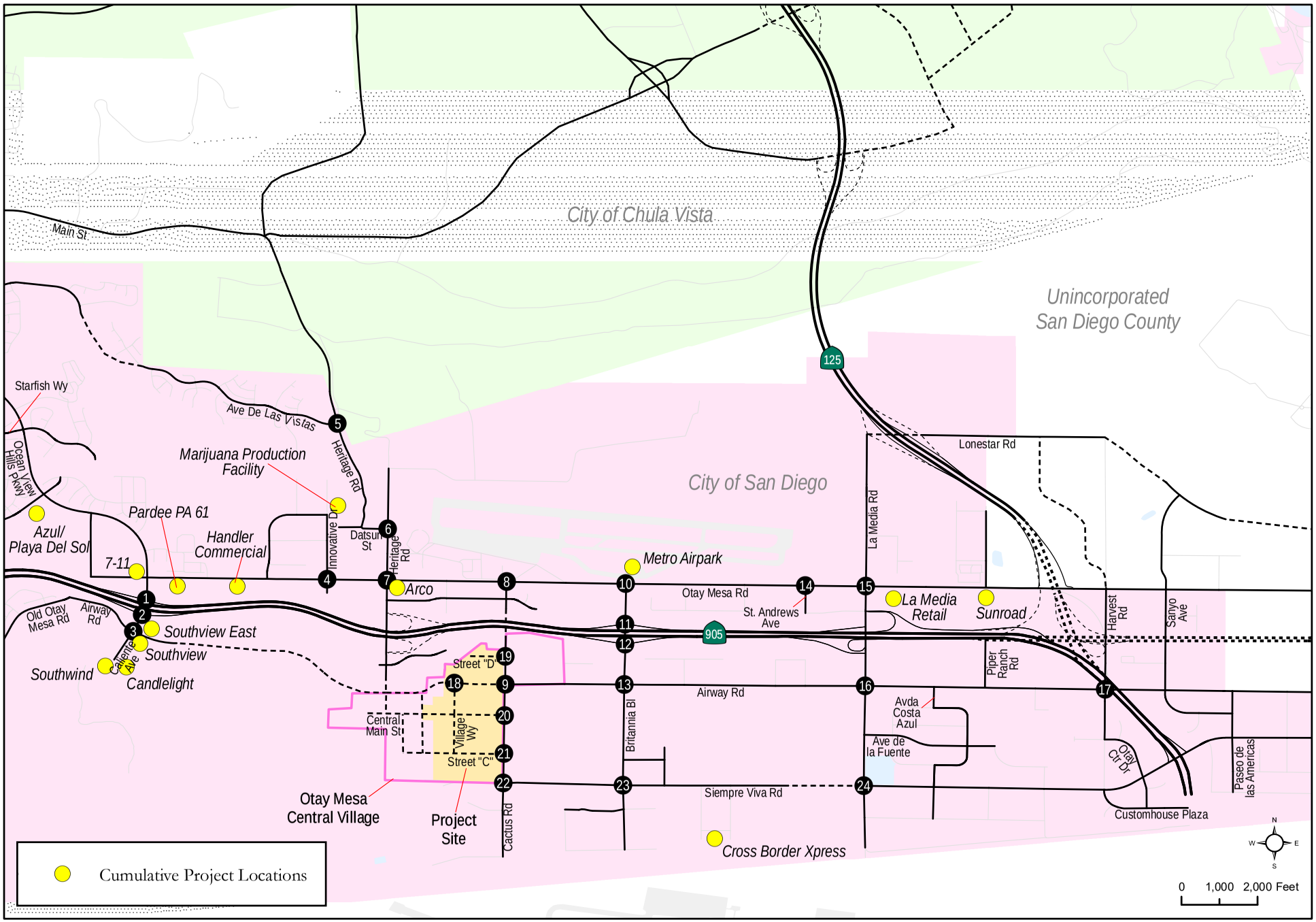
TABLE 6.1
CUMULATIVE PROJECTS TRIP GENERATION

Cumulative Project	Land Use	Daily Trips	AM Peak Hour (In / Out)	PM Peak Hour (In / Out)
11. California Terraces PA 61 [11]	Mixed-use Residential/Commercial	4,716	252 (101-in / 151-out)	486 (271-in / 215-out)
12. Cross Border Facility (Phase 2) [12]	Cross Border Facility	24,700	1,056 (606-in / 450-out)	1,167 (587-in / 580-out)
13. Metro Airpark (Phase 1) [13]	Airport / Retail	1,000	99 (77-in / 22-out)	106 (34-in / 72-out)
14. Plaza La Media (Full Buildout) [14]	Commercial/Retail	8,660	310 (183-in / 127-out)	812 (407-in / 405-out)
15. Sunroad Otay Mesa (Phase 1 and Phase 2) [15]	Warehouse	4,225	633 (444-in / 189-out)	676 (270-in / 406-out)
Cumulative Total		**65,846**	**3,997 (1,997-in / 2,000-out)**	**5,519 (2,708-in / 2,811-out)**

Source: Chen Ryan Associates, February 2019.

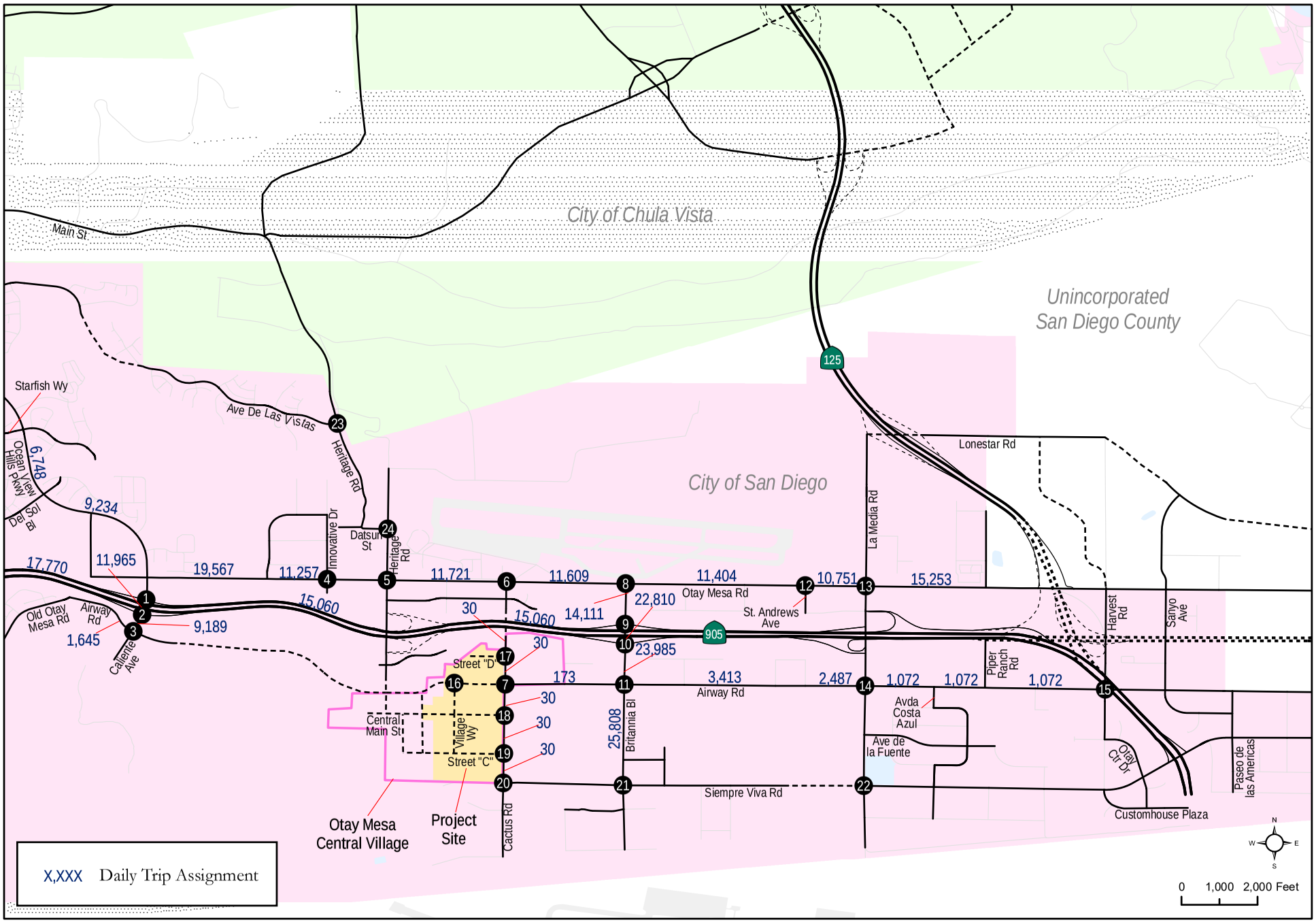
Notes:
[1] Trip Generation obtained from *California Terraces PA 61 TIS* prepared by LOS Engineering, Inc. January 14, 2019.
[2] Trip Generation obtained from *California Terraces PA 61 TIS* prepared by LOS Engineering, Inc. January 14, 2019.
[3] Trip Generation obtained from *City of San Diego Land Development Code – Trip Generation Manual, May 2003*
[4] Trip Generation obtained from *California Terraces PA 61 TIS* prepared by LOS Engineering, Inc. January 14, 2019.
[5] Trip Generation obtained from *California Terraces PA 61 TIS* prepared by LOS Engineering, Inc. January 14, 2019.
[6] Trip Generation obtained from *California Terraces PA 61 TIS* prepared by LOS Engineering, Inc. January 14, 2019.
[7] Trip Generation obtained from *California Terraces PA 61 TIS* prepared by LOS Engineering, Inc. January 14, 2019.
[8] Trip Generation obtained from *California Terraces PA 61 TIS* prepared by LOS Engineering, Inc. January 14, 2019.
[9] Trip Generation obtained from *California Terraces PA 61 TIS* prepared by LOS Engineering, Inc. January 14, 2019.
[10] Trip Generation obtained from *California Terraces PA 61 TIS* prepared by LOS Engineering, Inc. January 14, 2019.
[11] Trip Generation obtained from *California Terraces PA 61 TIS* prepared by LOS Engineering, Inc. January 14, 2019.
[12] Trip Generation obtained from *Cross Border Facility TIS* prepared by LSA Associates. June 2011.
[13] Trip Generation obtained from *Metro Airpark TIS* prepared by Rick Engineering. April 2012.
[14] Trip Generation obtained from draft *Plaza La Media TIS* prepared by STC. August 2017.
[15] Trip Generation obtained from *Sunroad Otay Mesa TIS* prepared by Kimley-Horn. February 2017.

Figure 6-1 displays cumulative projects location while **Figure 6-2** and **Figure 6-3** display cumulative projects trip assignment for roadways and intersections, respectively. Detailed information regarding the cumulative projects is provided in **Appendix G.**



Otay Mesa Lumina
Transportation Impact Study
CHEN RYAN

Figure 6-1
Cumulative Project Locations



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Transportation Impact Study

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Figure 6-2
Near-Term Year 2023 Cumulative Projects - Trip Assignment

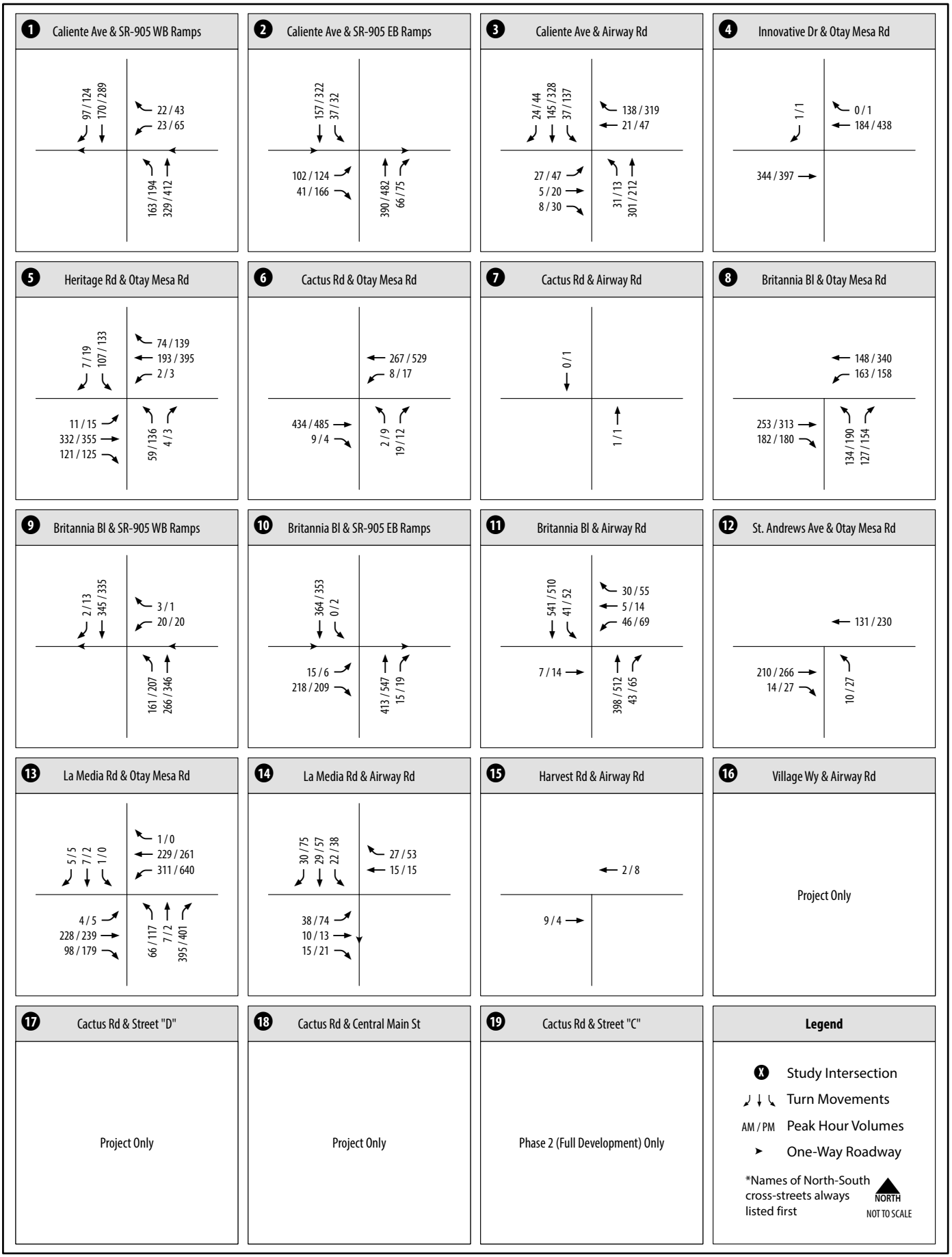

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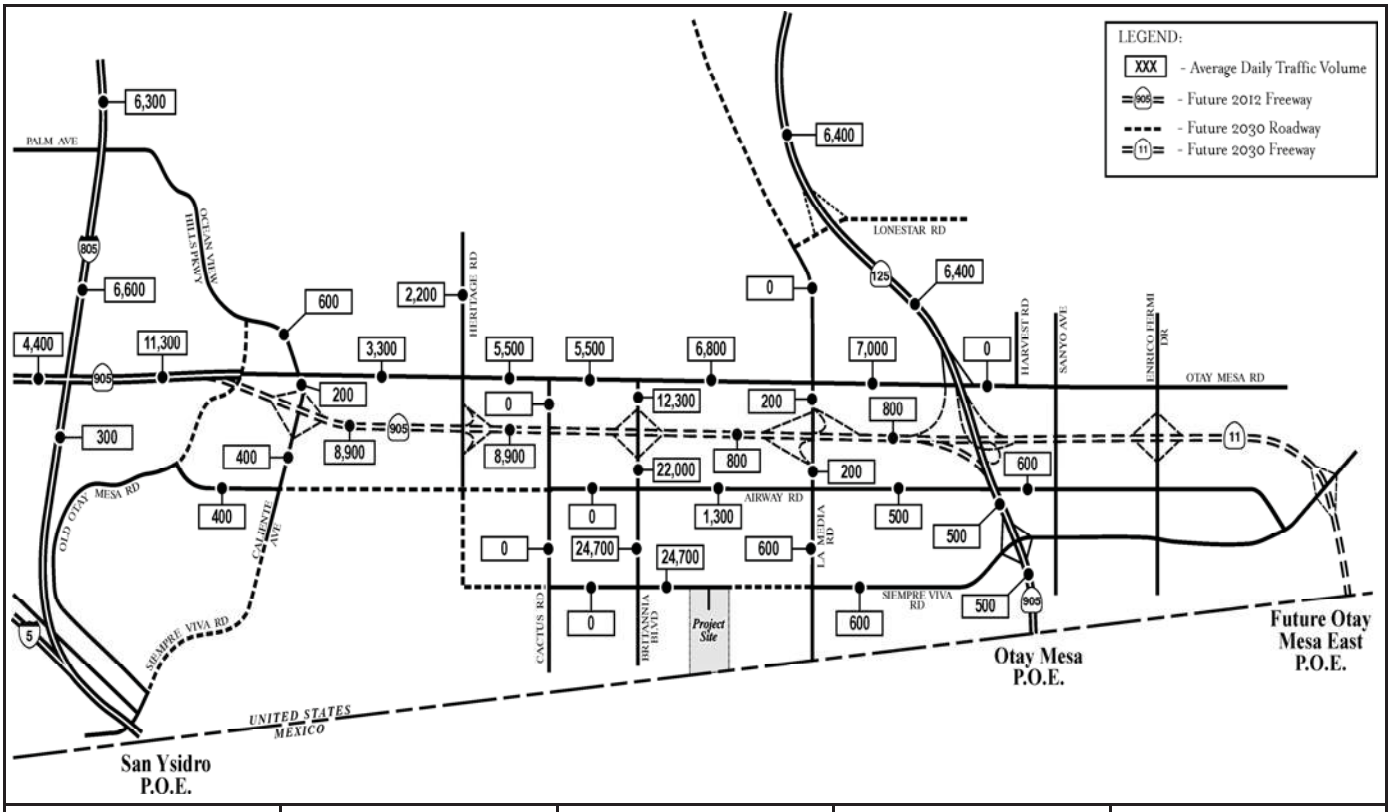
Figure 6-3
Near-Term Year 2023 Cumulative Projects - Trip Assignment
(Intersections 1-19)

1 . ross order press



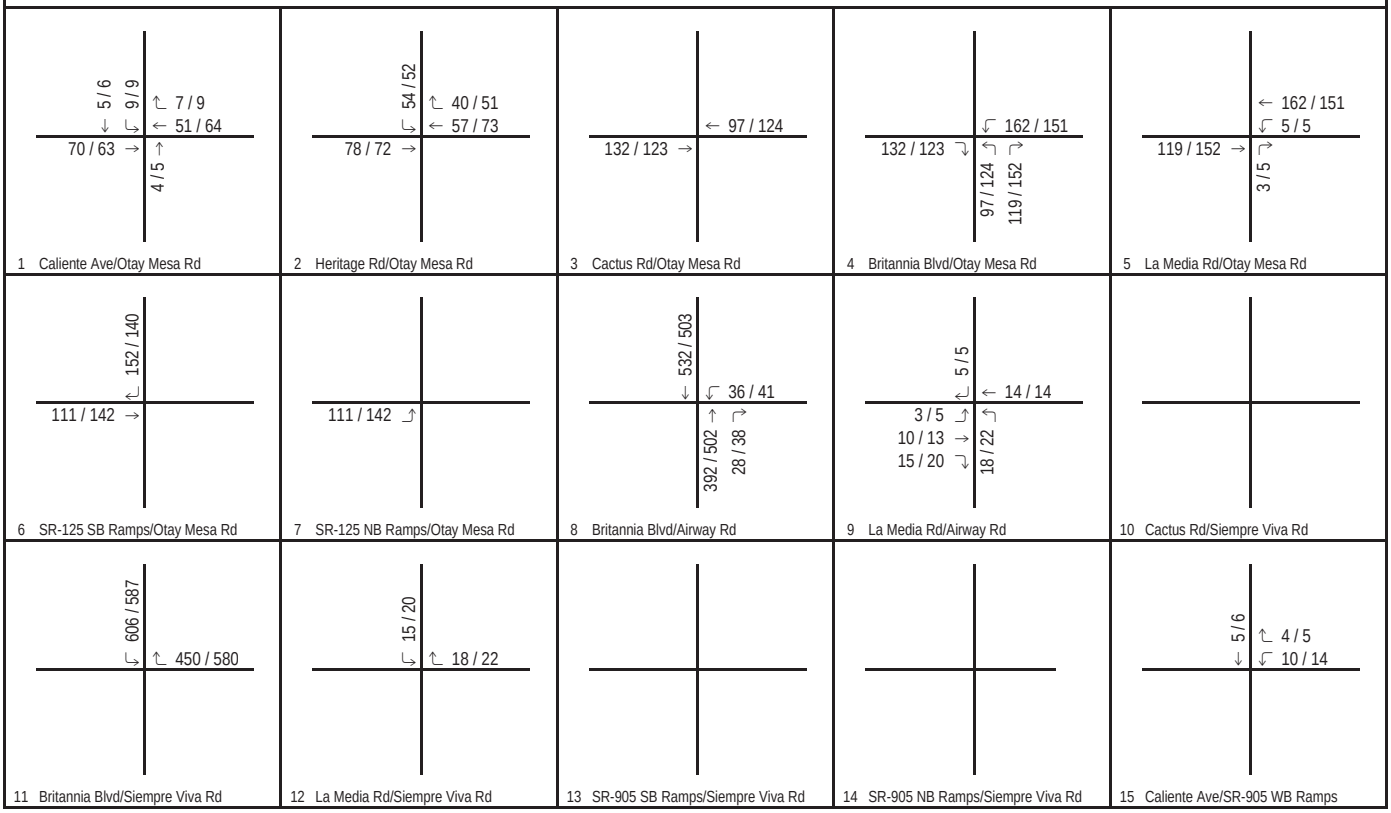


FIGURE 6A

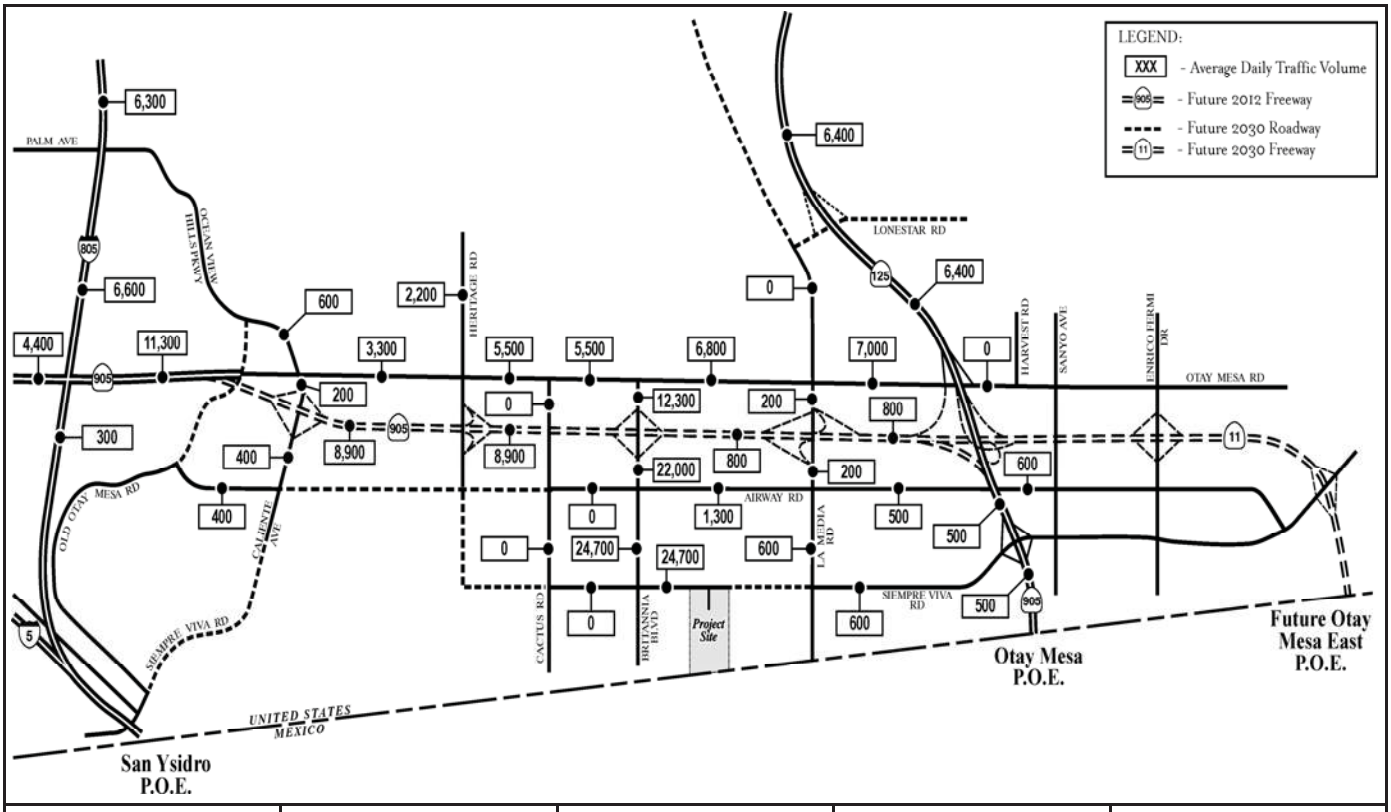
Legend

123 / 456 AM / PM Volume

Otay Cross Border Facility

Project Trip Assignment (Phase 2)

1 . ross order press



10 / 14 ← 5 / 6 ↳ 13 / 15 ↳ 16 Caliente Ave/SR-905 EB Ramps	Future Intersection 17 Heritage Rd/SR-905 WB Ramps	Future Intersection 18 Heritage Rd/SR-905 EB Ramps	295 / 274 ← ↰ 20 / 20 161 / 207 ↰ 216 / 276 → 19 Britannia Blvd/SR-905 WB Ramps	314 / 294 ← 218 / 209 ↳ 377 / 483 → 15 / 19 ↳ 20 Britannia Blvd/SR-905 EB Ramps
5 / 5 ← 3 / 5 → 21 La Media Rd/SR-905 WB Ramps	5 / 5 ← 3 / 5 → 22 La Media Rd/SR-905 EB Ramps	Future Intersection 23 Heritage Rd/Airway Rd	24 Cactus Rd/Airway Rd	10 / 14 ↰ 13 / 15 ↳ 25 Caliente Ave/Airway Rd
Future Intersection 26 La Media Rd/Lone Star Rd	Future Intersection 27 SR-125 SB off-ramp/Lone Star Rd	Future Intersection 28 SR-125 NB on-ramp/Lone Star Rd		

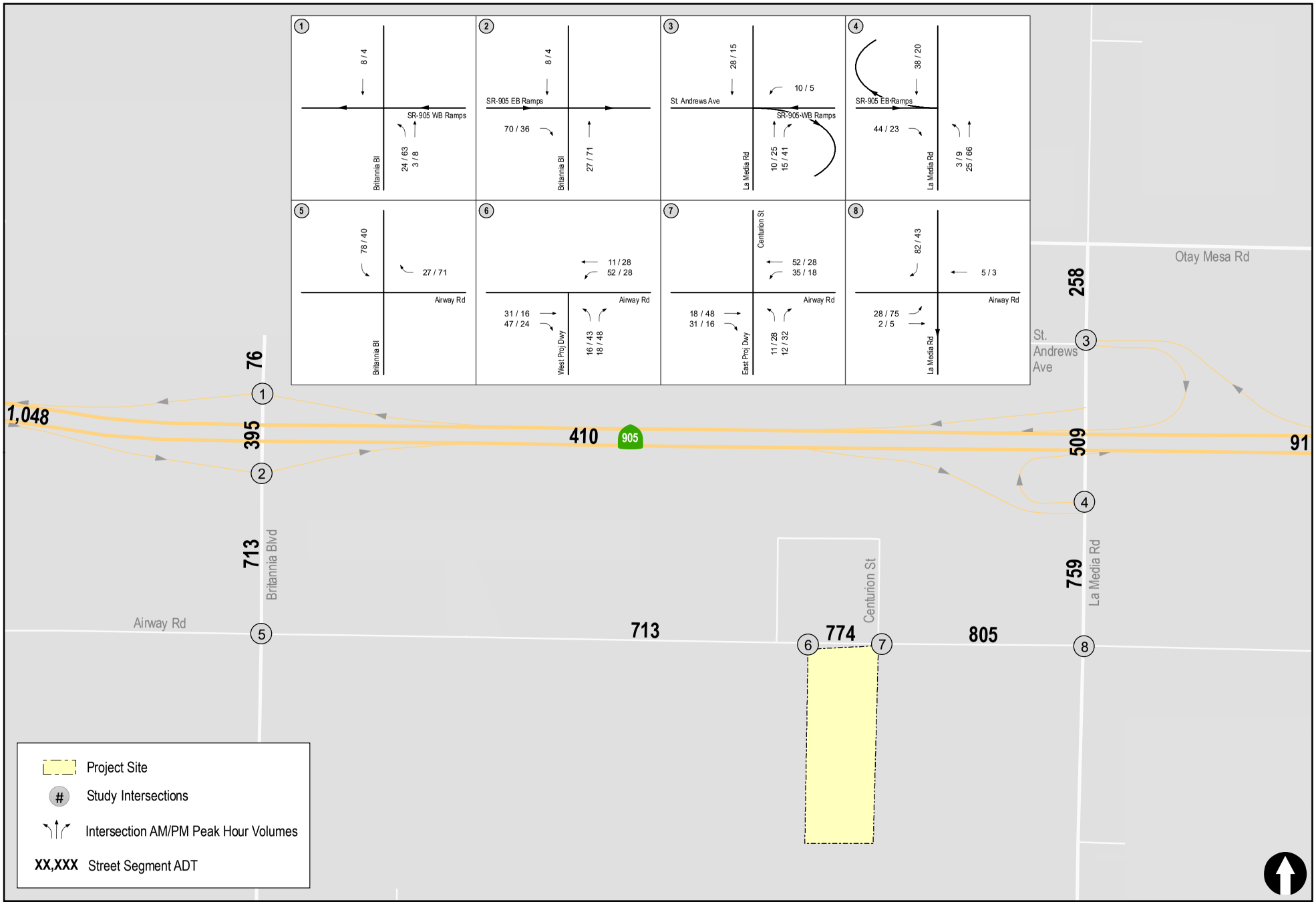
FIGURE 6B

Legend

123 / 456 AM / PM Volume

Otay Cross Border Facility

Project Trip Assignment (Phase 2)



N:\3219\Figures
Date: 9/14/2020
Time: 3:12 PM

Figure 7-2

Project Traffic Volumes

AIRWAY LOGISTICS CENTER

INTERSECTION	DIRECTION	TOTAL CUMULATIVE PROJECTS						OTAY TRUCK PARK						AIRWAY GARDENS (Residential Project)						AIRWAY INDUSTRIAL (#3219)						CROSS BORDER EXPRESS (from Lumina Appendix)						OTAY MESA LUMINA CUMULATIVE PROJECTS TRAFFIC VOLUMES (YEAR 2023)					
		Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm
1. Otay Mesa Rd / Britannia Blvd	Sb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													0	0	0	0	0	0
	Wb	0	0	148	340	13	35	0	0	0	0	0	0	0	0	0	0	6	24					6	4					162	151	0	0	148	340	163	158
	Nb	33	16	0	0	79	87	0	0	0	0	0	0	24	10	0	0	40	17	1	4			2	4	119	152			97	124	127	154	0	0	134	190
	Eb	64	99	253	313	0	0	0	0	0	0	0	0	10	40	0	0	0	0	4	2					132	123					182	180	253	313	0	0
		0	0	0	0	0	0																														
2. Britannia Blvd / SR-905 WB Ramps	Sb	2	13	74	129	0	0	0	0	0	0	0	0	0	0	16	64	0	0	0	0	8	4	0	0			295	274			2	13	345	335	0	0
	Wb	3	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0					20	20	3	1	0	0	20	20
	Nb	0	0	117	105	114	118	0	0	0	0	26	28	0	0	64	27	64	27	0	0	3	8	24	63			216	276	161	207	0	0	266	346	161	207
	Eb	0	0	0	0	22	21	0	0	0	0	22	21	0	0	0	0	0	0	0	0	0	0	0	0							0	0	0	0	0	0
		0	0	0	0	0	0																														
3. Britannia Blvd / SR-905 EB Ramps	Sb	0	0	97	149	0	2	0	0	22	21	0	0	0	0	17	65	0	0	0	0	8	4	0	0			314	294			0	0	364	353	0	2
	Wb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							0	0	0	0	0	0
	Nb	28	29	218	218	0	0	26	28	26	28	0	0	2	1	129	55	0	0	0	0	27	71	0	0	15	19	377	483			15	19	413	547	0	0
	Eb	108	121	0	0	15	6	22	21	0	0	0	0	16	64	0	0	0	0	70	36	0	0	0	0	218	209					218	209	0	0	15	6
		0	0	0	0	0	0																														
4. Britannia Blvd / Airway Rd	Sb	33	129	54	49	119	92	0	0	45	42	0	0	33	129	0	0	0	0	0	0	0	0	78	40			532	503			0	0	541	510	41	52
	Wb	57	126	16	57	10	28	0	0	0	0	0	0	0	0	11	43	0	0	27	71	0	0	0	0					36	41	30	55	5	14	46	69
	Nb	15	27	55	67	0	0	0	0	52	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	38	392	502			43	65	395	512	0	0
	Eb	0	0	51	33	131	56	0	0	0	0	0	0	0	0	44	19	131	56	0	0	0	0	0	0							0	0	7	14	0	0
		0	0	0	0	0	0																														
5. Airway Rd / Continental St (Proj Dwy #4)	Sb	0	0	0	0	174	74	0	0	0	0	0	0	0	0	0	0	174	74																		
	Wb	44	172	5	14	0	0	0	0	0	0	0	0	44	172	0	0	0	0									0	0					5	14		
	Nb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Eb	0	0	7	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0	0					7	14		
		0	0	0	0	0	0																														
6. Airway Rd / Cactus Rd	Sb	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Wb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Nb	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Eb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
		0	0	0	0	0	0																														
7. Cactus Rd / Proj Dwy #1	Sb	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0	0					0	1		
	Wb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Nb	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0	0					1	1		
	Eb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
		0	0	0	0	0	0																														
8. Airway Rd / Proj Dwy #2	Sb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Wb	0	0	5	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0	0					5	14		
	Nb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Eb	0	0	7	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0	0					7	14		
		0	0	0	0	0	0																														
9. Airway Rd / Proj Dwy #3	Sb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Wb	0	0	5	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0	0					5	14		
	Nb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Eb	0	0	7	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0	0					7	14		
		0	0	0	0	0	0																														
10. Airway Rd / Proj Dwy #5	Sb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Wb	0	0	49	186	0	0	0	0	0	0	0	0	0	0	44	172	0	0									0	0					5	14		
	Nb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Eb	0	0	181	88	0	0	0	0	0	0	0	0	0	0	174	74	0	0									0	0					7	14		
		0	0	0	0	0	0																														
11. Airway Rd / Proj Dwy #6	Sb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Wb	0	0	49	186	0	0	0	0	0	0	0	0	0	0	44	172	0	0									0	0					5	14		
	Nb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Eb	0	0	181	88	0	0	0	0	0	0	0	0	0	0	174	74	0	0									0	0					7	14		
		0	0	0	0	0	0																														
12. Britannia Blvd / Proj Dwy #7	Sb	0	0	64	77	0	0	0	0	45	42	0	0	0	0	0	0	0	0																		
	Wb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	Nb	0	0	70	94	0	0	0	0	52	57	0	0	0	0	0	0	0	0									420	540					438	577		
	Eb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		

Segment	Total Cumulative Projects Traffic	Otay Truck Parking	Airway Gardens Residential Project Volumes	Airway Project Volumes (#3219)	CROSS BORDER EXPRESS	OTAY MESA LUMINA CUMULATIVE PROJECTS TRAFFIC VOLUMES (YEAR 2023)
Cactus Road						
Airway Road to Project Driveway #1	30	0	0	0	0	30
Britannia Boulevard						
Otay Mesa Road to SR-905 WB Ramps	2,895	0	1,008	76	12,300	14,111
SR-905 WB Ramps to SR-905 EB Ramps	8,531	536	1,525	400	16,740	22,810
SR-905 EB Ramps to Airway Road	5,808	1,060	2,043	720	22,000	23,985
Airway Road to Project Driveway #7	2,168	1,060	0	0	24,700	25,808
Airway Road						
Cactus Road to Continental Street	173	0	0	0	0	173
Continental Street to Britannia Boulevard	2,897	0	2,724	0	0	173

APPENDIX G

NEAR-TERM (OPENING YEAR 2023) INTERSECTION LEVEL OF SERVICE WORKSHEETS

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	457	229	184	322	262	225
Future Volume (veh/h)	457	229	184	322	262	225
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	544	273	202	354	273	234
Peak Hour Factor	0.84	0.84	0.91	0.91	0.96	0.96
Percent Heavy Veh, %	16	16	16	16	16	16
Cap, veh/h	1716	999	226	2532	1065	489
Arrive On Green	0.38	0.38	0.14	0.56	0.35	0.35
Sat Flow, veh/h	4689	1349	1584	4689	3072	1409
Grp Volume(v), veh/h	544	273	202	354	273	234
Grp Sat Flow(s),veh/h/ln	1513	1349	1584	1513	1536	1409
Q Serve(g_s), s	10.0	8.3	14.8	4.4	7.5	15.4
Cycle Q Clear(g_c), s	10.0	8.3	14.8	4.4	7.5	15.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1716	999	226	2532	1065	489
V/C Ratio(X)	0.32	0.27	0.89	0.14	0.26	0.48
Avail Cap(c_a), veh/h	1716	999	249	2599	1065	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	5.6	49.8	12.5	27.7	30.3
Incr Delay (d2), s/veh	0.5	0.7	27.9	0.0	0.6	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	5.9	7.4	1.4	2.8	5.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.5	6.3	77.7	12.6	28.3	33.6
LnGrp LOS	C	A	E	B	C	C
Approach Vol, veh/h	817			556	507	
Approach Delay, s/veh	19.7			36.2	30.7	
Approach LOS	B			D	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	21.3	50.7				72.0	46.3
Change Period (Y+Rc), s	4.4	6.0				6.0	5.3
Max Green Setting (Gmax), s	18.6	44.7				67.7	41.0
Max Q Clear Time (g_c+I1), s	16.8	12.0				6.4	17.4
Green Ext Time (p_c), s	0.1	8.1				3.8	0.9

Intersection Summary		
HCM 6th Ctrl Delay		27.6
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	0	0	211	1	105	386	388	0	0	331	72
Future Volume (veh/h)	22	0	0	211	1	105	386	388	0	0	331	72
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1663	1663	1663	1663	1663	0	0	1663	1663
Adj Flow Rate, veh/h				245	0	123	415	417	0	0	385	84
Peak Hour Factor				0.86	0.86	0.86	0.93	0.93	0.93	0.86	0.86	0.86
Percent Heavy Veh, %				16	16	16	16	16	0	0	16	16
Cap, veh/h				299	0	511	469	3059	0	0	1712	360
Arrive On Green				0.19	0.00	0.19	0.15	0.67	0.00	0.00	0.46	0.46
Sat Flow, veh/h				1584	0	2708	3072	4689	0	0	3889	786
Grp Volume(v), veh/h				245	0	123	415	417	0	0	309	160
Grp Sat Flow(s),veh/h/ln				1584	0	1354	1536	1513	0	0	1513	1499
Q Serve(g_s), s				11.0	0.0	2.9	9.8	2.4	0.0	0.0	4.6	4.8
Cycle Q Clear(g_c), s				11.0	0.0	2.9	9.8	2.4	0.0	0.0	4.6	4.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.52
Lane Grp Cap(c), veh/h				299	0	511	469	3059	0	0	1385	686
V/C Ratio(X)				0.82	0.00	0.24	0.89	0.14	0.00	0.00	0.22	0.23
Avail Cap(c_a), veh/h				554	0	947	469	3059	0	0	1385	686
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				28.8	0.0	25.5	30.7	4.3	0.0	0.0	12.1	12.2
Incr Delay (d2), s/veh				5.6	0.0	0.2	18.0	0.1	0.0	0.0	0.4	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.2	0.0	0.8	4.6	0.5	0.0	0.0	1.4	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				34.4	0.0	25.8	48.8	4.4	0.0	0.0	12.5	13.0
LnGrp LOS				C	A	C	D	A	A	A	B	B
Approach Vol, veh/h					368			832			469	
Approach Delay, s/veh					31.5			26.5			12.7	
Approach LOS					C			C			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	55.0		16.0	39.0		19.1
Change Period (Y+Rc), s	5.1		* 4.7	5.1		5.1
Max Green Setting (Gmax), s	49.9		* 11	33.9		25.9
Max Q Clear Time (g_c+I1), s	4.4		11.8	6.8		13.0
Green Ext Time (p_c), s	3.0		0.0	3.0		1.0

Intersection Summary	
HCM 6th Ctrl Delay	23.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1	710	0	0	0	0	581	208	76	506	0
Future Volume (veh/h)	170	1	710	0	0	0	0	581	208	76	506	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	1663	1663	0
Adj Flow Rate, veh/h	202	1	845				0	638	229	90	602	0
Peak Hour Factor	0.84	0.84	0.84				0.91	0.91	0.91	0.84	0.84	0.84
Percent Heavy Veh, %	16	16	16				0	16	16	16	16	0
Cap, veh/h	596	3	914				0	988	354	137	2387	0
Arrive On Green	0.38	0.38	0.38				0.00	0.44	0.44	0.04	0.53	0.00
Sat Flow, veh/h	1576	8	2417				0	2345	811	3072	4689	0
Grp Volume(v), veh/h	203	0	845				0	445	422	90	602	0
Grp Sat Flow(s),veh/h/ln	1584	0	1208				0	1580	1494	1536	1513	0
Q Serve(g_s), s	9.7	0.0	35.5				0.0	23.5	23.5	3.1	7.7	0.0
Cycle Q Clear(g_c), s	9.7	0.0	35.5				0.0	23.5	23.5	3.1	7.7	0.0
Prop In Lane	1.00		1.00				0.00		0.54	1.00		0.00
Lane Grp Cap(c), veh/h	599	0	914				0	690	652	137	2387	0
V/C Ratio(X)	0.34	0.00	0.92				0.00	0.65	0.65	0.65	0.25	0.00
Avail Cap(c_a), veh/h	654	0	998				0	690	652	225	2387	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.6	0.0	31.6				0.0	23.5	23.5	50.0	13.8	0.0
Incr Delay (d2), s/veh	0.3	0.0	13.2				0.0	4.6	4.9	5.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	11.1				0.0	9.1	8.7	1.3	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.9	0.0	44.8				0.0	28.1	28.4	55.2	14.0	0.0
LnGrp LOS	C	A	D				A	C	C	E	B	A
Approach Vol, veh/h		1048						867			692	
Approach Delay, s/veh		40.7						28.2			19.4	
Approach LOS		D						C			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	9.5	51.5	45.3	61.0
Change Period (Y+Rc), s	* 4.7	5.1	5.1	5.1
Max Green Setting (Gmax), s	* 7.8	43.4	43.9	55.9
Max Q Clear Time (g_c+I1), s	5.1	25.5	37.5	9.7
Green Ext Time (p_c), s	0.0	5.2	2.7	4.5

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	56	8	21	21	407	11	618	34	317	594	85
Future Volume (veh/h)	223	56	8	21	21	407	11	618	34	317	594	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.94	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	180	209	10	25	25	67	12	665	37	417	782	112
Peak Hour Factor	0.80	0.80	0.80	0.85	0.85	0.85	0.93	0.93	0.93	0.76	0.76	0.76
Percent Heavy Veh, %	16	16	16	16	16	16	16	16	16	16	16	16
Cap, veh/h	234	232	11	82	82	133	17	953	53	440	966	801
Arrive On Green	0.15	0.15	0.15	0.10	0.10	0.10	0.01	0.31	0.31	0.28	0.58	0.58
Sat Flow, veh/h	1584	1567	75	811	811	1322	1584	3034	169	1584	1663	1380
Grp Volume(v), veh/h	180	0	219	50	0	67	12	346	356	417	782	112
Grp Sat Flow(s),veh/h/ln	1584	0	1642	1622	0	1322	1584	1580	1623	1584	1663	1380
Q Serve(g_s), s	13.7	0.0	16.4	3.6	0.0	6.0	0.9	24.1	24.2	32.4	46.6	4.6
Cycle Q Clear(g_c), s	13.7	0.0	16.4	3.6	0.0	6.0	0.9	24.1	24.2	32.4	46.6	4.6
Prop In Lane	1.00		0.05	0.50		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	234	0	243	163	0	133	17	496	510	440	966	801
V/C Ratio(X)	0.77	0.00	0.90	0.31	0.00	0.50	0.70	0.70	0.70	0.95	0.81	0.14
Avail Cap(c_a), veh/h	243	0	252	440	0	359	51	496	510	526	966	801
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	0.0	52.5	52.3	0.0	53.4	61.8	37.7	37.8	44.4	20.8	12.0
Incr Delay (d2), s/veh	12.0	0.0	30.6	1.3	0.0	3.8	17.0	7.9	7.7	23.3	7.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	8.8	1.5	0.0	2.1	0.5	10.2	10.5	15.2	18.6	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.3	0.0	83.1	53.6	0.0	57.1	78.8	45.6	45.5	67.7	28.1	12.3
LnGrp LOS	E	A	F	D	A	E	E	D	D	E	C	B
Approach Vol, veh/h		399			117			714			1311	
Approach Delay, s/veh		74.2			55.6			46.1			39.3	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.2	44.5		23.8	5.8	77.9		17.8
Change Period (Y+Rc), s	4.4	* 5.1		5.3	4.4	5.1		5.2
Max Green Setting (Gmax), s	4.6	* 35		19.2	4.0	72.8		34.0
Max Q Clear Time (g_c+I1), s	34.4	26.2		18.4	2.9	48.6		8.0
Green Ext Time (p_c), s	0.4	3.5		0.1	0.0	8.3		0.6

Intersection Summary	
HCM 6th Ctrl Delay	47.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↰	↗		↕			↕	
Traffic Vol, veh/h	0	103	0	0	111	58	0	0	0	183	0	0
Future Vol, veh/h	0	103	0	0	111	58	0	0	0	183	0	0
Conflicting Peds, #/hr	10	0	0	0	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	79	79	79	92	92	92	56	56	56
Heavy Vehicles, %	16	16	100	100	16	16	100	100	100	16	100	16
Mvmt Flow	0	129	0	0	141	73	0	0	0	327	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	224	0	0	129	0	0	317	353	139	290	280	161
Stage 1	-	-	-	-	-	-	129	129	-	151	151	-
Stage 2	-	-	-	-	-	-	188	224	-	139	129	-
Critical Hdwy	4.26	-	-	5.1	-	-	8.1	7.5	7.2	7.26	7.5	6.36
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Follow-up Hdwy	2.344	-	-	3.1	-	-	4.4	4.9	4.2	3.644	4.9	3.444
Pot Cap-1 Maneuver	1266	-	-	1022	-	-	484	443	703	635	493	849
Stage 1	-	-	-	-	-	-	686	635	-	819	619	-
Stage 2	-	-	-	-	-	-	632	569	-	832	635	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1254	-	-	1022	-	-	479	439	696	623	488	833
Mov Cap-2 Maneuver	-	-	-	-	-	-	479	439	-	623	488	-
Stage 1	-	-	-	-	-	-	686	635	-	811	613	-
Stage 2	-	-	-	-	-	-	626	563	-	824	635	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	17
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1254	-	-	1022	-	-	623
HCM Lane V/C Ratio	-	-	-	-	-	-	-	0.525
HCM Control Delay (s)	0	0	-	-	0	-	-	17
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	3.1

Intersection	
Int Delay, s/veh	7.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	102	4	3	54	42	0
Future Vol, veh/h	102	4	3	54	42	0
Conflicting Peds, #/hr	10	10	0	10	10	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	55	55	44	44
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	157	6	5	98	95	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	264	74	0	0	113	0
Stage 1	64	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.56	6.36	-	-	4.26	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.444	-	-	2.344	-
Pot Cap-1 Maneuver	696	950	-	-	1394	-
Stage 1	924	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	635	932	-	-	1381	-
Mov Cap-2 Maneuver	635	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	739	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	7.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	660	1381	-
HCM Lane V/C Ratio	-	-	0.247	0.069	-
HCM Control Delay (s)	-	-	12.2	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	57	0	0	53
Future Vol, veh/h	0	0	57	0	0	53
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	16	100	100	16
Mvmt Flow	0	0	62	0	0	58

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	72	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.2	-	-	-	-
Pot Cap-1 Maneuver	0	774	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	767	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	103	0	0	111	0	0
Future Vol, veh/h	103	0	0	111	0	0
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	112	0	0	121	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	112	0	243	122
Stage 1	-	-	-	-	112	-
Stage 2	-	-	-	-	131	-
Critical Hdwy	-	-	5.1	-	7.4	7.2
Critical Hdwy Stg 1	-	-	-	-	6.4	-
Critical Hdwy Stg 2	-	-	-	-	6.4	-
Follow-up Hdwy	-	-	3.1	-	4.4	4.2
Pot Cap-1 Maneuver	-	-	1039	-	574	720
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	701	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1039	-	568	713
Mov Cap-2 Maneuver	-	-	-	-	568	-
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	694	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1039	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	103	0	0	111	0	0
Future Vol, veh/h	103	0	0	111	0	0
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	112	0	0	121	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	122
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.2
Pot Cap-1 Maneuver	-	-	0	-	0	720
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	713
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	286	0	0	169	0	0
Future Vol, veh/h	286	0	0	169	0	0
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	311	0	0	184	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	311	0	413	321
Stage 1	-	-	-	-	311	-
Stage 2	-	-	-	-	102	-
Critical Hdwy	-	-	5.6	-	8.1	7.7
Critical Hdwy Stg 1	-	-	-	-	6.9	-
Critical Hdwy Stg 2	-	-	-	-	7.3	-
Follow-up Hdwy	-	-	3.15	-	4.45	4.25
Pot Cap-1 Maneuver	-	-	805	-	408	512
Stage 1	-	-	-	-	537	-
Stage 2	-	-	-	-	700	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	805	-	404	507
Mov Cap-2 Maneuver	-	-	-	-	404	-
Stage 1	-	-	-	-	537	-
Stage 2	-	-	-	-	693	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	805	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	286	0	0	169	0	0
Future Vol, veh/h	286	0	0	169	0	0
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	311	0	0	184	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	321
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.7
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.25
Pot Cap-1 Maneuver	-	-	0	-	0	512
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	507
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	663	623	0
Future Vol, veh/h	0	0	0	663	623	0
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	100	16	16	100
Mvmt Flow	0	0	0	721	677	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	687	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.25	-	-	-	-
Pot Cap-1 Maneuver	0	284	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	281	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	546	336	252	601	275	143
Future Volume (veh/h)	546	336	252	601	275	143
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.95	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	691	425	304	724	309	161
Peak Hour Factor	0.79	0.79	0.83	0.83	0.89	0.89
Percent Heavy Veh, %	16	16	16	16	16	16
Cap, veh/h	1539	919	327	2636	1010	463
Arrive On Green	0.34	0.34	0.21	0.58	0.33	0.33
Sat Flow, veh/h	4689	1346	1584	4689	3072	1409
Grp Volume(v), veh/h	691	425	304	724	309	161
Grp Sat Flow(s),veh/h/ln	1513	1346	1584	1513	1536	1409
Q Serve(g_s), s	14.8	19.1	23.5	9.9	9.4	10.8
Cycle Q Clear(g_c), s	14.8	19.1	23.5	9.9	9.4	10.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1539	919	327	2636	1010	463
V/C Ratio(X)	0.45	0.46	0.93	0.27	0.31	0.35
Avail Cap(c_a), veh/h	1539	919	394	2828	1010	463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	10.1	48.6	13.0	31.3	31.7
Incr Delay (d2), s/veh	0.9	1.7	24.1	0.1	0.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	12.3	11.1	3.1	3.5	3.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.1	11.7	72.7	13.1	32.0	33.8
LnGrp LOS	C	B	E	B	C	C
Approach Vol, veh/h	1116			1028	470	
Approach Delay, s/veh	25.0			30.8	32.6	
Approach LOS	C			C	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	30.1	48.3				78.4	46.3
Change Period (Y+Rc), s	4.4	6.0				6.0	5.3
Max Green Setting (Gmax), s	31.0	42.3				77.7	41.0
Max Q Clear Time (g_c+I1), s	25.5	21.1				11.9	12.8
Green Ext Time (p_c), s	0.2	9.6				8.7	0.8

Intersection Summary	
HCM 6th Ctrl Delay	28.6
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	0	0	174	0	87	750	342	0	0	393	171
Future Volume (veh/h)	21	0	0	174	0	87	750	342	0	0	393	171
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.95	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1663	1663	1663	1663	1663	0	0	1663	1663
Adj Flow Rate, veh/h				200	0	100	852	389	0	0	462	201
Peak Hour Factor				0.87	0.87	0.87	0.88	0.88	0.88	0.85	0.85	0.85
Percent Heavy Veh, %				16	16	16	16	16	0	0	16	16
Cap, veh/h				237	0	402	929	3318	0	0	1165	483
Arrive On Green				0.15	0.00	0.15	0.30	0.73	0.00	0.00	0.37	0.37
Sat Flow, veh/h				1584	0	2689	3072	4689	0	0	3272	1294
Grp Volume(v), veh/h				200	0	100	852	389	0	0	447	216
Grp Sat Flow(s),veh/h/ln				1584	0	1344	1536	1513	0	0	1513	1390
Q Serve(g_s), s				10.5	0.0	2.8	22.8	2.1	0.0	0.0	9.2	9.8
Cycle Q Clear(g_c), s				10.5	0.0	2.8	22.8	2.1	0.0	0.0	9.2	9.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.93
Lane Grp Cap(c), veh/h				237	0	402	929	3318	0	0	1129	518
V/C Ratio(X)				0.85	0.00	0.25	0.92	0.12	0.00	0.00	0.40	0.42
Avail Cap(c_a), veh/h				281	0	477	985	3318	0	0	1129	518
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				35.2	0.0	32.0	28.6	3.4	0.0	0.0	19.6	19.8
Incr Delay (d2), s/veh				18.1	0.0	0.3	12.6	0.1	0.0	0.0	1.0	2.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.9	0.0	0.9	9.4	0.5	0.0	0.0	3.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				53.4	0.0	32.3	41.2	3.4	0.0	0.0	20.7	22.3
LnGrp LOS				D	A	C	D	A	A	A	C	C
Approach Vol, veh/h					300			1241			663	
Approach Delay, s/veh					46.3			29.4			21.2	
Approach LOS					D			C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	67.3		30.4	36.9		17.8
Change Period (Y+Rc), s	5.1		* 4.7	5.1		5.1
Max Green Setting (Gmax), s	62.2		* 27	30.2		15.1
Max Q Clear Time (g_c+I1), s	4.1		24.8	11.8		12.5
Green Ext Time (p_c), s	2.8		1.0	4.0		0.3

Intersection Summary		
HCM 6th Ctrl Delay		29.2
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	1	579	0	0	0	0	949	292	123	411	0
Future Volume (veh/h)	81	1	579	0	0	0	0	949	292	123	411	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	1663	1663	0
Adj Flow Rate, veh/h	98	1	578				0	1032	317	145	484	0
Peak Hour Factor	0.83	0.83	0.83				0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	16	16	16				0	16	16	16	16	0
Cap, veh/h	355	4	542				0	1361	414	198	3091	0
Arrive On Green	0.23	0.23	0.23				0.00	0.57	0.57	0.06	0.68	0.00
Sat Flow, veh/h	1568	16	2394				0	2455	722	3072	4689	0
Grp Volume(v), veh/h	99	0	578				0	684	665	145	484	0
Grp Sat Flow(s),veh/h/ln	1584	0	1197				0	1580	1515	1536	1513	0
Q Serve(g_s), s	5.7	0.0	24.9				0.0	35.8	36.7	5.1	4.2	0.0
Cycle Q Clear(g_c), s	5.7	0.0	24.9				0.0	35.8	36.7	5.1	4.2	0.0
Prop In Lane	0.99		1.00				0.00		0.48	1.00		0.00
Lane Grp Cap(c), veh/h	359	0	542				0	906	869	198	3091	0
V/C Ratio(X)	0.28	0.00	1.07				0.00	0.75	0.77	0.73	0.16	0.00
Avail Cap(c_a), veh/h	359	0	542				0	906	869	260	3091	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.1	0.0	42.5				0.0	17.6	17.8	50.5	6.3	0.0
Incr Delay (d2), s/veh	0.4	0.0	57.6				0.0	5.8	6.4	7.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	11.3				0.0	13.2	13.0	2.1	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	0.0	100.1				0.0	23.4	24.2	57.7	6.4	0.0
LnGrp LOS	D	A	F				A	C	C	E	A	A
Approach Vol, veh/h		677						1349			629	
Approach Delay, s/veh		90.7						23.8			18.2	
Approach LOS		F						C			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	11.8	68.2	30.0	80.0
Change Period (Y+Rc), s	* 4.7	5.1	5.1	5.1
Max Green Setting (Gmax), s	* 9.3	60.9	24.9	74.9
Max Q Clear Time (g_c+I1), s	7.1	38.7	26.9	6.2
Green Ext Time (p_c), s	0.1	9.9	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay	39.5
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	42	12	45	64	269	0	468	44	365	640	205
Future Volume (veh/h)	94	42	12	45	64	269	0	468	44	365	640	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.96	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	100	95	16	54	76	201	0	592	56	380	667	110
Peak Hour Factor	0.74	0.74	0.74	0.84	0.84	0.84	0.79	0.79	0.79	0.96	0.96	0.96
Percent Heavy Veh, %	16	16	16	16	16	16	16	16	16	16	16	16
Cap, veh/h	136	116	20	126	177	251	1	924	87	403	1010	838
Arrive On Green	0.09	0.09	0.09	0.19	0.19	0.19	0.00	0.32	0.32	0.25	0.61	0.61
Sat Flow, veh/h	1584	1357	229	677	952	1354	1584	2903	274	1584	1663	1380
Grp Volume(v), veh/h	100	0	111	130	0	201	0	321	327	380	667	110
Grp Sat Flow(s),veh/h/ln	1584	0	1586	1629	0	1354	1584	1580	1598	1584	1663	1380
Q Serve(g_s), s	7.9	0.0	8.8	9.1	0.0	18.2	0.0	22.3	22.5	30.2	33.8	4.4
Cycle Q Clear(g_c), s	7.9	0.0	8.8	9.1	0.0	18.2	0.0	22.3	22.5	30.2	33.8	4.4
Prop In Lane	1.00		0.14	0.42		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	136	0	136	302	0	251	1	503	509	403	1010	838
V/C Ratio(X)	0.74	0.00	0.82	0.43	0.00	0.80	0.00	0.64	0.64	0.94	0.66	0.13
Avail Cap(c_a), veh/h	174	0	174	432	0	359	49	503	509	538	1010	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.3	0.0	57.7	46.2	0.0	50.0	0.0	37.4	37.5	46.9	16.5	10.8
Incr Delay (d2), s/veh	7.6	0.0	16.5	1.2	0.0	9.5	0.0	6.1	6.1	19.3	3.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	4.1	3.8	0.0	6.8	0.0	9.3	9.5	13.8	12.8	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.9	0.0	74.1	47.5	0.0	59.4	0.0	43.5	43.6	66.2	19.9	11.1
LnGrp LOS	E	A	E	D	A	E	A	D	D	E	B	B
Approach Vol, veh/h		211			331			648			1157	
Approach Delay, s/veh		69.7			54.7			43.6			34.3	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.1	45.9		16.3	0.0	83.0		29.0
Change Period (Y+Rc), s	4.4	* 5.1		5.3	4.4	5.1		5.2
Max Green Setting (Gmax), s	43.6	* 39		14.1	4.0	77.9		34.0
Max Q Clear Time (g_c+I1), s	32.2	24.5		10.8	0.0	35.8		20.2
Green Ext Time (p_c), s	0.5	4.2		0.2	0.0	7.8		1.6

Intersection Summary	
HCM 6th Ctrl Delay	42.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↰	↗		↕			↕	
Traffic Vol, veh/h	0	101	0	0	51	185	0	0	0	87	0	0
Future Vol, veh/h	0	101	0	0	51	185	0	0	0	87	0	0
Conflicting Peds, #/hr	10	0	0	0	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	83	83	83	92	92	92	46	46	46
Heavy Vehicles, %	16	16	100	100	16	16	100	100	100	16	100	16
Mvmt Flow	0	135	0	0	61	223	0	0	0	189	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	294	0	0	135	0	0	318	429	145	216	206	81
Stage 1	-	-	-	-	-	-	135	135	-	71	71	-
Stage 2	-	-	-	-	-	-	183	294	-	145	135	-
Critical Hdwy	4.26	-	-	5.1	-	-	8.1	7.5	7.2	7.26	7.5	6.36
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Follow-up Hdwy	2.344	-	-	3.1	-	-	4.4	4.9	4.2	3.644	4.9	3.444
Pot Cap-1 Maneuver	1192	-	-	1016	-	-	483	397	697	711	549	941
Stage 1	-	-	-	-	-	-	680	630	-	905	678	-
Stage 2	-	-	-	-	-	-	636	524	-	825	630	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1181	-	-	1016	-	-	478	393	690	697	544	923
Mov Cap-2 Maneuver	-	-	-	-	-	-	478	393	-	697	544	-
Stage 1	-	-	-	-	-	-	680	630	-	896	671	-
Stage 2	-	-	-	-	-	-	630	519	-	817	630	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	12.1
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1181	-	-	1016	-	-	697
HCM Lane V/C Ratio	-	-	-	-	-	-	-	0.271
HCM Control Delay (s)	0	0	-	-	0	-	-	12.1
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	1.1

Intersection	
Int Delay, s/veh	6.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	0	1	51	36	1
Future Vol, veh/h	70	0	1	51	36	1
Conflicting Peds, #/hr	10	10	0	10	10	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	70	70	63	63
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	93	0	1	73	57	2

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	174	58	0	0	84	0
Stage 1	48	-	-	-	-	-
Stage 2	126	-	-	-	-	-
Critical Hdwy	6.56	6.36	-	-	4.26	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.444	-	-	2.344	-
Pot Cap-1 Maneuver	785	970	-	-	1429	-
Stage 1	940	-	-	-	-	-
Stage 2	866	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	739	952	-	-	1415	-
Mov Cap-2 Maneuver	739	-	-	-	-	-
Stage 1	931	-	-	-	-	-
Stage 2	824	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	7.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	739	1415	-
HCM Lane V/C Ratio	-	-	0.126	0.04	-
HCM Control Delay (s)	-	-	10.6	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	52	0	0	25
Future Vol, veh/h	0	0	52	0	0	25
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	16	100	100	16
Mvmt Flow	0	0	57	0	0	27

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	67	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.2	-	-	-	-
Pot Cap-1 Maneuver	0	779	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	772	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	101	0	0	84	0	0
Future Vol, veh/h	101	0	0	84	0	0
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	110	0	0	91	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	110	0	211	120
Stage 1	-	-	-	-	110	-
Stage 2	-	-	-	-	101	-
Critical Hdwy	-	-	5.1	-	7.4	7.2
Critical Hdwy Stg 1	-	-	-	-	6.4	-
Critical Hdwy Stg 2	-	-	-	-	6.4	-
Follow-up Hdwy	-	-	3.1	-	4.4	4.2
Pot Cap-1 Maneuver	-	-	1042	-	602	723
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	727	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1042	-	596	716
Mov Cap-2 Maneuver	-	-	-	-	596	-
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	720	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1042	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	101	0	0	84	0	0
Future Vol, veh/h	101	0	0	84	0	0
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	110	0	0	91	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	120
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.2
Pot Cap-1 Maneuver	-	-	0	-	0	723
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	716
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	188	0	0	269	0	0
Future Vol, veh/h	188	0	0	269	0	0
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	204	0	0	292	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	204	0	360	214
Stage 1	-	-	-	-	204	-
Stage 2	-	-	-	-	156	-
Critical Hdwy	-	-	5.6	-	8.1	7.7
Critical Hdwy Stg 1	-	-	-	-	6.9	-
Critical Hdwy Stg 2	-	-	-	-	7.3	-
Follow-up Hdwy	-	-	3.15	-	4.45	4.25
Pot Cap-1 Maneuver	-	-	909	-	446	607
Stage 1	-	-	-	-	619	-
Stage 2	-	-	-	-	648	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	909	-	442	601
Mov Cap-2 Maneuver	-	-	-	-	442	-
Stage 1	-	-	-	-	619	-
Stage 2	-	-	-	-	642	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	909	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	188	0	0	269	0	0
Future Vol, veh/h	188	0	0	269	0	0
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	204	0	0	292	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	214
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.7
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.25
Pot Cap-1 Maneuver	-	-	0	-	0	607
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	601
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	512	697	0
Future Vol, veh/h	0	0	0	512	697	0
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	100	16	16	100
Mvmt Flow	0	0	0	557	758	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	768	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.25	-	-	-	-
Pot Cap-1 Maneuver	0	249	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	247	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

APPENDIX H

NEAR-TERM (OPENING YEAR 2023) + PROJECT INTERSECTION LEVEL OF SERVICE WORKSHEETS

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	457	240	197	322	267	230
Future Volume (veh/h)	457	240	197	322	267	230
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	544	286	216	354	278	240
Peak Hour Factor	0.84	0.84	0.91	0.91	0.96	0.96
Percent Heavy Veh, %	16	16	16	16	16	16
Cap, veh/h	1699	989	239	2552	1055	484
Arrive On Green	0.37	0.37	0.15	0.56	0.34	0.34
Sat Flow, veh/h	4689	1349	1584	4689	3072	1409
Grp Volume(v), veh/h	544	286	216	354	278	240
Grp Sat Flow(s),veh/h/ln	1513	1349	1584	1513	1536	1409
Q Serve(g_s), s	10.2	9.1	16.0	4.4	7.8	16.1
Cycle Q Clear(g_c), s	10.2	9.1	16.0	4.4	7.8	16.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1699	989	239	2552	1055	484
V/C Ratio(X)	0.32	0.29	0.90	0.14	0.26	0.50
Avail Cap(c_a), veh/h	1699	989	247	2574	1055	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	6.0	49.8	12.4	28.3	31.0
Incr Delay (d2), s/veh	0.5	0.7	31.6	0.0	0.6	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	6.4	8.2	1.4	2.9	5.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.1	6.8	81.4	12.5	28.9	34.6
LnGrp LOS	C	A	F	B	C	C
Approach Vol, veh/h	830			570	518	
Approach Delay, s/veh	20.1			38.6	31.6	
Approach LOS	C			D	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	22.4	50.7				73.1	46.3
Change Period (Y+Rc), s	4.4	6.0				6.0	5.3
Max Green Setting (Gmax), s	18.6	44.7				67.7	41.0
Max Q Clear Time (g_c+I1), s	18.0	12.2				6.4	18.1
Green Ext Time (p_c), s	0.0	8.2				3.8	0.9

Intersection Summary			
HCM 6th Ctrl Delay		28.7	
HCM 6th LOS		C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	0	0	218	1	105	418	398	0	0	355	72
Future Volume (veh/h)	22	0	0	218	1	105	418	398	0	0	355	72
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1663	1663	1663	1663	1663	0	0	1663	1663
Adj Flow Rate, veh/h				253	0	123	449	428	0	0	413	84
Peak Hour Factor				0.86	0.86	0.86	0.93	0.93	0.93	0.86	0.86	0.86
Percent Heavy Veh, %				16	16	16	16	16	0	0	16	16
Cap, veh/h				306	0	524	507	3041	0	0	1673	329
Arrive On Green				0.19	0.00	0.19	0.17	0.67	0.00	0.00	0.44	0.44
Sat Flow, veh/h				1584	0	2710	3072	4689	0	0	3938	745
Grp Volume(v), veh/h				253	0	123	449	428	0	0	327	170
Grp Sat Flow(s),veh/h/ln				1584	0	1355	1536	1513	0	0	1513	1507
Q Serve(g_s), s				11.4	0.0	2.9	10.6	2.6	0.0	0.0	5.0	5.3
Cycle Q Clear(g_c), s				11.4	0.0	2.9	10.6	2.6	0.0	0.0	5.0	5.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.49
Lane Grp Cap(c), veh/h				306	0	524	507	3041	0	0	1337	666
V/C Ratio(X)				0.83	0.00	0.23	0.89	0.14	0.00	0.00	0.24	0.26
Avail Cap(c_a), veh/h				551	0	942	507	3041	0	0	1337	666
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				28.9	0.0	25.4	30.4	4.5	0.0	0.0	13.0	13.1
Incr Delay (d2), s/veh				5.6	0.0	0.2	16.9	0.1	0.0	0.0	0.4	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.4	0.0	0.9	4.9	0.6	0.0	0.0	1.6	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				34.5	0.0	25.6	47.3	4.6	0.0	0.0	13.5	14.0
LnGrp LOS				C	A	C	D	A	A	A	B	B
Approach Vol, veh/h					376			877			497	
Approach Delay, s/veh					31.6			26.5			13.6	
Approach LOS					C			C			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	55.0		17.0	38.0		19.5
Change Period (Y+Rc), s	5.1		* 4.7	5.1		5.1
Max Green Setting (Gmax), s	49.9		* 12	32.9		25.9
Max Q Clear Time (g_c+I1), s	4.6		12.6	7.3		13.4
Green Ext Time (p_c), s	3.0		0.0	3.1		1.0

Intersection Summary		
HCM 6th Ctrl Delay		23.9
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1	787	0	0	0	0	623	211	76	537	0
Future Volume (veh/h)	170	1	787	0	0	0	0	623	211	76	537	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	1663	1663	0
Adj Flow Rate, veh/h	202	1	937				0	685	232	90	639	0
Peak Hour Factor	0.84	0.84	0.84				0.91	0.91	0.91	0.84	0.84	0.84
Percent Heavy Veh, %	16	16	16				0	16	16	16	16	0
Cap, veh/h	637	3	978				0	955	323	136	2281	0
Arrive On Green	0.40	0.40	0.40				0.00	0.42	0.42	0.04	0.50	0.00
Sat Flow, veh/h	1576	8	2419				0	2384	779	3072	4689	0
Grp Volume(v), veh/h	203	0	937				0	470	447	90	639	0
Grp Sat Flow(s),veh/h/ln	1584	0	1209				0	1580	1500	1536	1513	0
Q Serve(g_s), s	9.6	0.0	41.2				0.0	27.1	27.1	3.2	8.9	0.0
Cycle Q Clear(g_c), s	9.6	0.0	41.2				0.0	27.1	27.1	3.2	8.9	0.0
Prop In Lane	1.00		1.00				0.00		0.52	1.00		0.00
Lane Grp Cap(c), veh/h	640	0	978				0	656	623	136	2281	0
V/C Ratio(X)	0.32	0.00	0.96				0.00	0.72	0.72	0.66	0.28	0.00
Avail Cap(c_a), veh/h	651	0	994				0	656	623	177	2281	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.2	0.0	31.7				0.0	26.6	26.6	51.4	15.7	0.0
Incr Delay (d2), s/veh	0.3	0.0	19.1				0.0	6.6	7.0	5.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	13.5				0.0	10.8	10.4	1.3	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	0.0	50.8				0.0	33.2	33.6	57.1	16.0	0.0
LnGrp LOS	C	A	D				A	C	C	E	B	A
Approach Vol, veh/h		1140						917			729	
Approach Delay, s/veh		45.8						33.4			21.1	
Approach LOS		D						C			C	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	9.5	50.5	49.2	60.0
Change Period (Y+Rc), s	* 4.7	5.1	5.1	5.1
Max Green Setting (Gmax), s	* 6.3	43.9	44.9	54.9
Max Q Clear Time (g_c+I1), s	5.2	29.1	43.2	10.9
Green Ext Time (p_c), s	0.0	5.0	1.0	4.8

Intersection Summary	
HCM 6th Ctrl Delay	35.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	57	8	22	23	407	11	618	34	317	638	149
Future Volume (veh/h)	266	57	8	22	23	407	11	618	34	317	638	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.94	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	206	247	10	26	27	67	12	665	37	417	839	64
Peak Hour Factor	0.80	0.80	0.80	0.85	0.85	0.85	0.93	0.93	0.93	0.76	0.76	0.76
Percent Heavy Veh, %	16	16	16	16	16	16	16	16	16	16	16	16
Cap, veh/h	249	248	10	80	83	133	17	930	52	439	952	790
Arrive On Green	0.16	0.16	0.16	0.10	0.10	0.10	0.01	0.31	0.31	0.28	0.57	0.57
Sat Flow, veh/h	1584	1581	64	796	827	1322	1584	3034	169	1584	1663	1380
Grp Volume(v), veh/h	206	0	257	53	0	67	12	346	356	417	839	64
Grp Sat Flow(s),veh/h/ln	1584	0	1645	1623	0	1322	1584	1580	1623	1584	1663	1380
Q Serve(g_s), s	15.9	0.0	19.7	3.8	0.0	6.1	1.0	24.5	24.6	32.6	54.9	2.6
Cycle Q Clear(g_c), s	15.9	0.0	19.7	3.8	0.0	6.1	1.0	24.5	24.6	32.6	54.9	2.6
Prop In Lane	1.00		0.04	0.49		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	249	0	258	164	0	133	17	484	497	439	952	790
V/C Ratio(X)	0.83	0.00	0.99	0.32	0.00	0.50	0.70	0.71	0.72	0.95	0.88	0.08
Avail Cap(c_a), veh/h	249	0	258	438	0	356	50	484	497	499	952	790
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	0.0	53.1	52.7	0.0	53.7	62.1	38.8	38.8	44.7	23.2	12.1
Incr Delay (d2), s/veh	19.1	0.0	54.4	1.5	0.0	3.7	17.1	8.7	8.6	25.6	11.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	0.0	11.9	1.6	0.0	2.1	0.5	10.5	10.7	15.6	22.7	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.6	0.0	107.5	54.2	0.0	57.4	79.2	47.5	47.4	70.3	34.8	12.3
LnGrp LOS	E	A	F	D	A	E	E	D	D	E	C	B
Approach Vol, veh/h		463			120			714			1320	
Approach Delay, s/veh		91.1			56.0			48.0			44.9	
Approach LOS		F			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	39.3	43.7		25.1	5.8	77.3		17.9
Change Period (Y+Rc), s	4.4	* 5.1		5.3	4.4	5.1		5.2
Max Green Setting (Gmax), s	39.7	* 37		19.8	4.0	72.2		34.0
Max Q Clear Time (g_c+I1), s	34.6	26.6		21.7	3.0	56.9		8.1
Green Ext Time (p_c), s	0.4	3.7		0.0	0.0	7.0		0.6

Intersection Summary	
HCM 6th Ctrl Delay	54.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	11.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↱		↕			↕	
Traffic Vol, veh/h	0	122	0	24	131	58	0	0	10	183	0	0
Future Vol, veh/h	0	122	0	24	131	58	0	0	10	183	0	0
Conflicting Peds, #/hr	10	0	0	0	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	79	79	79	92	92	92	56	56	56
Heavy Vehicles, %	16	16	100	100	16	16	100	100	100	16	100	16
Mvmt Flow	0	153	0	30	166	73	0	0	11	327	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	249	0	0	153	0	0	426	462	163	405	389	186
Stage 1	-	-	-	-	-	-	153	153	-	236	236	-
Stage 2	-	-	-	-	-	-	273	309	-	169	153	-
Critical Hdwy	4.26	-	-	5.1	-	-	8.1	7.5	7.2	7.26	7.5	6.36
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Follow-up Hdwy	2.344	-	-	3.1	-	-	4.4	4.9	4.2	3.644	4.9	3.444
Pot Cap-1 Maneuver	1239	-	-	998	-	-	402	378	679	532	421	821
Stage 1	-	-	-	-	-	-	663	617	-	737	561	-
Stage 2	-	-	-	-	-	-	562	515	-	801	617	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1227	-	-	998	-	-	388	361	673	500	402	805
Mov Cap-2 Maneuver	-	-	-	-	-	-	388	361	-	500	402	-
Stage 1	-	-	-	-	-	-	663	617	-	730	536	-
Stage 2	-	-	-	-	-	-	537	492	-	781	617	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1	10.4	24.8
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	673	1227	-	-	998	-	-	500
HCM Lane V/C Ratio	0.016	-	-	-	0.03	-	-	0.654
HCM Control Delay (s)	10.4	0	-	-	8.7	0	-	24.8
HCM Lane LOS	B	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0.1	-	-	4.7

Intersection	
Int Delay, s/veh	7.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	102	4	3	71	42	0
Future Vol, veh/h	102	4	3	71	42	0
Conflicting Peds, #/hr	10	10	0	10	10	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	55	55	44	44
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	157	6	5	129	95	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	280	90	0	0	144	0
Stage 1	80	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.56	6.36	-	-	4.26	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.444	-	-	2.344	-
Pot Cap-1 Maneuver	681	931	-	-	1357	-
Stage 1	909	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	620	913	-	-	1344	-
Mov Cap-2 Maneuver	620	-	-	-	-	-
Stage 1	900	-	-	-	-	-
Stage 2	737	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	7.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	644	1344	-
HCM Lane V/C Ratio	-	-	0.253	0.071	-
HCM Control Delay (s)	-	-	12.5	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	8	66	19	0	53
Future Vol, veh/h	0	8	66	19	0	53
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	16	100	100	16
Mvmt Flow	0	9	72	21	0	58

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	93	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.2	-	-	-	-
Pot Cap-1 Maneuver	0	751	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	744	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	744	-
HCM Lane V/C Ratio	-	-	0.012	-
HCM Control Delay (s)	-	-	9.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	120	0	20	111	0	8
Future Vol, veh/h	120	0	20	111	0	8
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	130	0	22	121	0	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	130	0	305	140
Stage 1	-	-	-	-	130	-
Stage 2	-	-	-	-	175	-
Critical Hdwy	-	-	5.1	-	7.4	7.2
Critical Hdwy Stg 1	-	-	-	-	6.4	-
Critical Hdwy Stg 2	-	-	-	-	6.4	-
Follow-up Hdwy	-	-	3.1	-	4.4	4.2
Pot Cap-1 Maneuver	-	-	1021	-	524	702
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	666	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1021	-	507	695
Mov Cap-2 Maneuver	-	-	-	-	507	-
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	645	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	695	-	-	1021	-
HCM Lane V/C Ratio	0.013	-	-	0.021	-
HCM Control Delay (s)	10.2	-	-	8.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	118	10	0	131	0	4
Future Vol, veh/h	118	10	0	131	0	4
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	128	11	0	142	0	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	144
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.2
Pot Cap-1 Maneuver	-	-	0	-	0	698
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	691
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	691	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-
HCM Control Delay (s)	10.2	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	315	0	22	213	0	9
Future Vol, veh/h	315	0	22	213	0	9
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	342	0	24	232	0	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	342	0	516	352
Stage 1	-	-	-	-	342	-
Stage 2	-	-	-	-	174	-
Critical Hdwy	-	-	5.6	-	8.1	7.7
Critical Hdwy Stg 1	-	-	-	-	6.9	-
Critical Hdwy Stg 2	-	-	-	-	7.3	-
Follow-up Hdwy	-	-	3.15	-	4.45	4.25
Pot Cap-1 Maneuver	-	-	777	-	343	488
Stage 1	-	-	-	-	515	-
Stage 2	-	-	-	-	632	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	777	-	328	483
Mov Cap-2 Maneuver	-	-	-	-	328	-
Stage 1	-	-	-	-	515	-
Stage 2	-	-	-	-	604	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	12.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	483	-	-	777	-
HCM Lane V/C Ratio	0.02	-	-	0.031	-
HCM Control Delay (s)	12.6	-	-	9.8	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	324	0	0	235	0	6
Future Vol, veh/h	324	0	0	235	0	6
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	352	0	0	255	0	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	362
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.7
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.25
Pot Cap-1 Maneuver	-	-	0	-	0	480
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	475
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	475	-	-	-
HCM Lane V/C Ratio	0.014	-	-	-
HCM Control Delay (s)	12.7	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	663	652	16
Future Vol, veh/h	0	0	0	663	652	16
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	100	16	16	100
Mvmt Flow	0	0	0	721	709	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	728	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.25	-	-	-	-
Pot Cap-1 Maneuver	0	266	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	263	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	546	341	260	601	285	155
Future Volume (veh/h)	546	341	260	601	285	155
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.95	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	691	432	313	724	320	174
Peak Hour Factor	0.79	0.79	0.83	0.83	0.89	0.89
Percent Heavy Veh, %	16	16	16	16	16	16
Cap, veh/h	1537	914	335	2657	999	458
Arrive On Green	0.34	0.34	0.21	0.59	0.33	0.33
Sat Flow, veh/h	4689	1345	1584	4689	3072	1409
Grp Volume(v), veh/h	691	432	313	724	320	174
Grp Sat Flow(s),veh/h/ln	1513	1345	1584	1513	1536	1409
Q Serve(g_s), s	15.0	20.0	24.5	9.9	9.9	12.0
Cycle Q Clear(g_c), s	15.0	20.0	24.5	9.9	9.9	12.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1537	914	335	2657	999	458
V/C Ratio(X)	0.45	0.47	0.93	0.27	0.32	0.38
Avail Cap(c_a), veh/h	1537	914	384	2798	999	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	10.5	48.8	12.9	32.0	32.7
Incr Delay (d2), s/veh	1.0	1.8	26.5	0.1	0.8	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	12.8	11.8	3.1	3.7	4.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.5	12.2	75.3	13.0	32.9	35.1
LnGrp LOS	C	B	E	B	C	D
Approach Vol, veh/h	1123			1037	494	
Approach Delay, s/veh	25.3			31.8	33.7	
Approach LOS	C			C	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	31.1	48.7				79.8	46.3
Change Period (Y+Rc), s	4.4	6.0				6.0	5.3
Max Green Setting (Gmax), s	30.6	42.7				77.7	41.0
Max Q Clear Time (g_c+I1), s	26.5	22.0				11.9	14.0
Green Ext Time (p_c), s	0.2	9.6				8.7	0.9

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	0	0	178	0	87	821	364	0	0	406	171
Future Volume (veh/h)	21	0	0	178	0	87	821	364	0	0	406	171
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.95	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1663	1663	1663	1663	1663	0	0	1663	1663
Adj Flow Rate, veh/h				205	0	100	933	414	0	0	478	201
Peak Hour Factor				0.87	0.87	0.87	0.88	0.88	0.88	0.85	0.85	0.85
Percent Heavy Veh, %				16	16	16	16	16	0	0	16	16
Cap, veh/h				241	0	409	1009	3305	0	0	1086	436
Arrive On Green				0.15	0.00	0.15	0.33	0.73	0.00	0.00	0.34	0.34
Sat Flow, veh/h				1584	0	2690	3072	4689	0	0	3303	1267
Grp Volume(v), veh/h				205	0	100	933	414	0	0	458	221
Grp Sat Flow(s),veh/h/ln				1584	0	1345	1536	1513	0	0	1513	1394
Q Serve(g_s), s				10.7	0.0	2.8	24.9	2.3	0.0	0.0	9.9	10.5
Cycle Q Clear(g_c), s				10.7	0.0	2.8	24.9	2.3	0.0	0.0	9.9	10.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.91
Lane Grp Cap(c), veh/h				241	0	409	1009	3305	0	0	1042	480
V/C Ratio(X)				0.85	0.00	0.24	0.92	0.13	0.00	0.00	0.44	0.46
Avail Cap(c_a), veh/h				277	0	471	1059	3305	0	0	1042	480
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				35.1	0.0	31.7	27.5	3.5	0.0	0.0	21.5	21.7
Incr Delay (d2), s/veh				19.5	0.0	0.3	12.9	0.1	0.0	0.0	1.3	3.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.1	0.0	0.9	10.2	0.5	0.0	0.0	3.5	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				54.6	0.0	32.1	40.5	3.5	0.0	0.0	22.9	24.9
LnGrp LOS				D	A	C	D	A	A	A	C	C
Approach Vol, veh/h					305			1347			679	
Approach Delay, s/veh					47.2			29.1			23.5	
Approach LOS					D			C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	67.0		32.6	34.4		18.0
Change Period (Y+Rc), s	5.1		* 4.7	5.1		5.1
Max Green Setting (Gmax), s	61.9		* 29	27.9		14.9
Max Q Clear Time (g_c+I1), s	4.3		26.9	12.5		12.7
Green Ext Time (p_c), s	3.0		1.0	3.8		0.2

Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	1	622	0	0	0	0	1042	299	123	428	0
Future Volume (veh/h)	81	1	622	0	0	0	0	1042	299	123	428	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	1663	1663	0
Adj Flow Rate, veh/h	98	1	629				0	1133	325	145	504	0
Peak Hour Factor	0.83	0.83	0.83				0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	16	16	16				0	16	16	16	16	0
Cap, veh/h	355	4	542				0	1388	393	197	3091	0
Arrive On Green	0.23	0.23	0.23				0.00	0.57	0.57	0.06	0.68	0.00
Sat Flow, veh/h	1568	16	2394				0	2501	684	3072	4689	0
Grp Volume(v), veh/h	99	0	629				0	735	723	145	504	0
Grp Sat Flow(s),veh/h/ln	1584	0	1197				0	1580	1522	1536	1513	0
Q Serve(g_s), s	5.7	0.0	24.9				0.0	40.7	42.4	5.1	4.4	0.0
Cycle Q Clear(g_c), s	5.7	0.0	24.9				0.0	40.7	42.4	5.1	4.4	0.0
Prop In Lane	0.99		1.00				0.00		0.45	1.00		0.00
Lane Grp Cap(c), veh/h	359	0	542				0	907	874	197	3091	0
V/C Ratio(X)	0.28	0.00	1.16				0.00	0.81	0.83	0.74	0.16	0.00
Avail Cap(c_a), veh/h	359	0	542				0	907	874	232	3091	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.1	0.0	42.5				0.0	18.7	19.0	50.6	6.3	0.0
Incr Delay (d2), s/veh	0.4	0.0	91.2				0.0	7.8	8.9	9.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	13.8				0.0	15.2	15.5	2.2	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	0.0	133.8				0.0	26.4	27.9	60.2	6.4	0.0
LnGrp LOS	D	A	F				A	C	C	E	A	A
Approach Vol, veh/h		728						1458			649	
Approach Delay, s/veh		120.4						27.2			18.4	
Approach LOS		F						C			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	11.8	68.2	30.0	80.0
Change Period (Y+Rc), s	* 4.7	5.1	5.1	5.1
Max Green Setting (Gmax), s	* 8.3	61.9	24.9	74.9
Max Q Clear Time (g_c+I1), s	7.1	44.4	26.9	6.4
Green Ext Time (p_c), s	0.0	9.5	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	49.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	45	12	46	65	269	0	468	44	365	664	241
Future Volume (veh/h)	193	45	12	46	65	269	0	468	44	365	664	241
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.96	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663
Adj Flow Rate, veh/h	169	190	16	55	77	201	0	592	56	380	692	147
Peak Hour Factor	0.74	0.74	0.74	0.84	0.84	0.84	0.79	0.79	0.79	0.96	0.96	0.96
Percent Heavy Veh, %	16	16	16	16	16	16	16	16	16	16	16	16
Cap, veh/h	223	211	18	125	175	249	1	786	74	402	927	769
Arrive On Green	0.14	0.14	0.14	0.18	0.18	0.18	0.00	0.27	0.27	0.25	0.56	0.56
Sat Flow, veh/h	1584	1501	126	679	950	1353	1584	2902	274	1584	1663	1379
Grp Volume(v), veh/h	169	0	206	132	0	201	0	322	326	380	692	147
Grp Sat Flow(s),veh/h/ln	1584	0	1627	1629	0	1353	1584	1580	1596	1584	1663	1379
Q Serve(g_s), s	13.6	0.0	16.5	9.5	0.0	18.9	0.0	24.7	24.9	31.2	41.8	7.0
Cycle Q Clear(g_c), s	13.6	0.0	16.5	9.5	0.0	18.9	0.0	24.7	24.9	31.2	41.8	7.0
Prop In Lane	1.00		0.08	0.42		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	223	0	229	300	0	249	1	428	432	402	927	769
V/C Ratio(X)	0.76	0.00	0.90	0.44	0.00	0.81	0.00	0.75	0.76	0.95	0.75	0.19
Avail Cap(c_a), veh/h	235	0	242	418	0	347	48	428	432	485	927	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	0.0	56.0	48.0	0.0	51.8	0.0	44.3	44.3	48.6	22.2	14.5
Incr Delay (d2), s/veh	11.1	0.0	30.6	1.3	0.0	10.6	0.0	11.6	11.6	23.9	5.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	8.7	4.0	0.0	7.1	0.0	10.9	11.0	14.7	16.8	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.9	0.0	86.6	49.3	0.0	62.4	0.0	55.8	55.9	72.4	27.7	15.1
LnGrp LOS	E	A	F	D	A	E	A	E	E	E	C	B
Approach Vol, veh/h		375			333			648			1219	
Approach Delay, s/veh		77.3			57.2			55.9			40.1	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	41.0		24.0	0.0	79.0		29.6
Change Period (Y+Rc), s	4.4	* 5.1		5.3	4.4	5.1		5.2
Max Green Setting (Gmax), s	4.0	* 36		19.7	4.0	72.3		34.0
Max Q Clear Time (g_c+I1), s	3.2	26.9		18.5	0.0	43.8		20.9
Green Ext Time (p_c), s	0.4	3.2		0.1	0.0	7.7		1.5

Intersection Summary	
HCM 6th Ctrl Delay	51.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↰	↗		↕			↕	
Traffic Vol, veh/h	0	145	0	13	62	185	0	0	23	87	0	0
Future Vol, veh/h	0	145	0	13	62	185	0	0	23	87	0	0
Conflicting Peds, #/hr	10	0	0	0	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	83	83	83	92	92	92	46	46	46
Heavy Vehicles, %	16	16	100	100	16	16	100	100	100	16	100	16
Mvmt Flow	0	193	0	16	75	223	0	0	25	189	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	308	0	0	193	0	0	422	533	203	333	310	95
Stage 1	-	-	-	-	-	-	193	193	-	117	117	-
Stage 2	-	-	-	-	-	-	229	340	-	216	193	-
Critical Hdwy	4.26	-	-	5.1	-	-	8.1	7.5	7.2	7.26	7.5	6.36
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.26	6.5	-
Follow-up Hdwy	2.344	-	-	3.1	-	-	4.4	4.9	4.2	3.644	4.9	3.444
Pot Cap-1 Maneuver	1177	-	-	959	-	-	405	340	641	595	472	925
Stage 1	-	-	-	-	-	-	628	590	-	855	643	-
Stage 2	-	-	-	-	-	-	597	497	-	755	590	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1166	-	-	959	-	-	395	329	635	552	457	907
Mov Cap-2 Maneuver	-	-	-	-	-	-	395	329	-	552	457	-
Stage 1	-	-	-	-	-	-	628	590	-	846	623	-
Stage 2	-	-	-	-	-	-	579	482	-	718	590	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	10.9	14.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	635	1166	-	-	959	-	-	552
HCM Lane V/C Ratio	0.039	-	-	-	0.016	-	-	0.343
HCM Control Delay (s)	10.9	0	-	-	8.8	0	-	14.9
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	1.5

Intersection	
Int Delay, s/veh	5.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	0	1	74	36	1
Future Vol, veh/h	70	0	1	74	36	1
Conflicting Peds, #/hr	10	10	0	10	10	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	70	70	63	63
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	93	0	1	106	57	2

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	190	74	0	0	117	0
Stage 1	64	-	-	-	-	-
Stage 2	126	-	-	-	-	-
Critical Hdwy	6.56	6.36	-	-	4.26	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.444	-	-	2.344	-
Pot Cap-1 Maneuver	768	950	-	-	1389	-
Stage 1	924	-	-	-	-	-
Stage 2	866	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	722	932	-	-	1376	-
Mov Cap-2 Maneuver	722	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	823	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	7.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	722	1376	-
HCM Lane V/C Ratio	-	-	0.129	0.042	-
HCM Control Delay (s)	-	-	10.7	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	17	58	11	0	25
Future Vol, veh/h	0	17	58	11	0	25
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	16	100	100	16
Mvmt Flow	0	18	63	12	0	27

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	79	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.2	-	-	-	-
Pot Cap-1 Maneuver	0	766	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	759	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	759	-
HCM Lane V/C Ratio	-	-	0.024	-
HCM Control Delay (s)	-	-	9.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	124	0	11	84	0	18
Future Vol, veh/h	124	0	11	84	0	18
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	135	0	12	91	0	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	135	0	260	145
Stage 1	-	-	-	-	135	-
Stage 2	-	-	-	-	125	-
Critical Hdwy	-	-	5.1	-	7.4	7.2
Critical Hdwy Stg 1	-	-	-	-	6.4	-
Critical Hdwy Stg 2	-	-	-	-	6.4	-
Follow-up Hdwy	-	-	3.1	-	4.4	4.2
Pot Cap-1 Maneuver	-	-	1016	-	560	697
Stage 1	-	-	-	-	698	-
Stage 2	-	-	-	-	706	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1016	-	548	690
Mov Cap-2 Maneuver	-	-	-	-	548	-
Stage 1	-	-	-	-	698	-
Stage 2	-	-	-	-	691	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	690	-	-	1016	-
HCM Lane V/C Ratio	0.028	-	-	0.012	-
HCM Control Delay (s)	10.4	-	-	8.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	136	6	0	95	0	9
Future Vol, veh/h	136	6	0	95	0	9
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	148	7	0	103	0	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	162
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.2
Pot Cap-1 Maneuver	-	-	0	-	0	680
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	674
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	674	-	-	-
HCM Lane V/C Ratio	0.015	-	-	-
HCM Control Delay (s)	10.4	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	255	0	13	293	0	21
Future Vol, veh/h	255	0	13	293	0	21
Conflicting Peds, #/hr	0	0	0	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	277	0	14	318	0	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	277	0	474	287
Stage 1	-	-	-	-	277	-
Stage 2	-	-	-	-	197	-
Critical Hdwy	-	-	5.6	-	8.1	7.7
Critical Hdwy Stg 1	-	-	-	-	6.9	-
Critical Hdwy Stg 2	-	-	-	-	7.3	-
Follow-up Hdwy	-	-	3.15	-	4.45	4.25
Pot Cap-1 Maneuver	-	-	836	-	368	541
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	611	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	836	-	357	536
Mov Cap-2 Maneuver	-	-	-	-	357	-
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	593	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	12
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	536	-	-	836	-
HCM Lane V/C Ratio	0.043	-	-	0.017	-
HCM Control Delay (s)	12	-	-	9.4	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	276	0	0	306	0	14
Future Vol, veh/h	276	0	0	306	0	14
Conflicting Peds, #/hr	0	0	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	16	100	100	16	100	100
Mvmt Flow	300	0	0	333	0	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	310
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.7
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.25
Pot Cap-1 Maneuver	-	-	0	-	0	521
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	516
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	516	-	-	-
HCM Lane V/C Ratio	0.029	-	-	-
HCM Control Delay (s)	12.2	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	512	713	9
Future Vol, veh/h	0	0	0	512	713	9
Conflicting Peds, #/hr	0	10	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	100	100	16	16	100
Mvmt Flow	0	0	0	557	775	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	790	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.25	-	-	-	-
Pot Cap-1 Maneuver	0	240	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	238	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

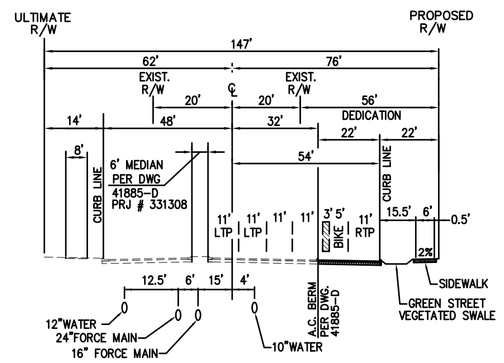
Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

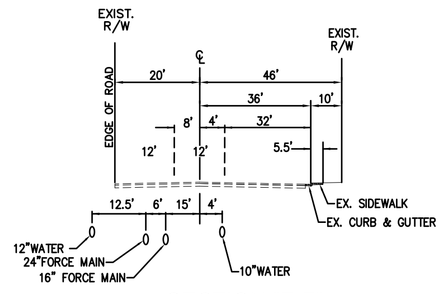
APPENDIX I

FRONTAGE IMPROVEMENTS CONCEPTUAL PLANS

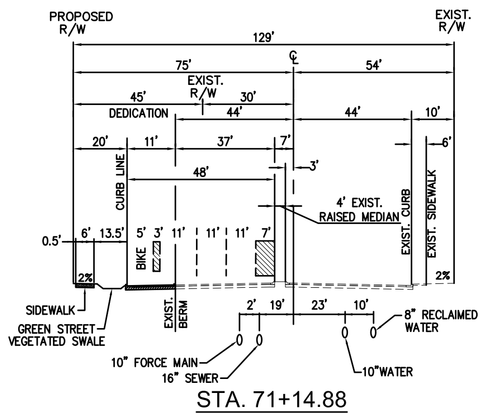
CONCEPTUAL STRIPING PLAN FOR:
BRITANNIA AIRWAY LOGISTICS CENTER



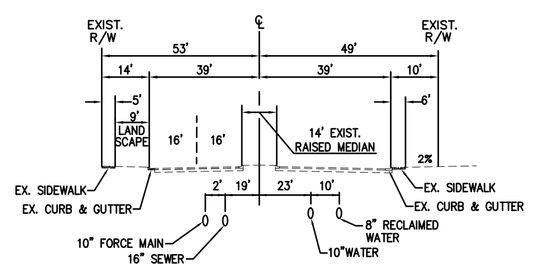
STA. 42+51.60
SECTION "A-A"~ CACTUS ROAD
NOT TO SCALE



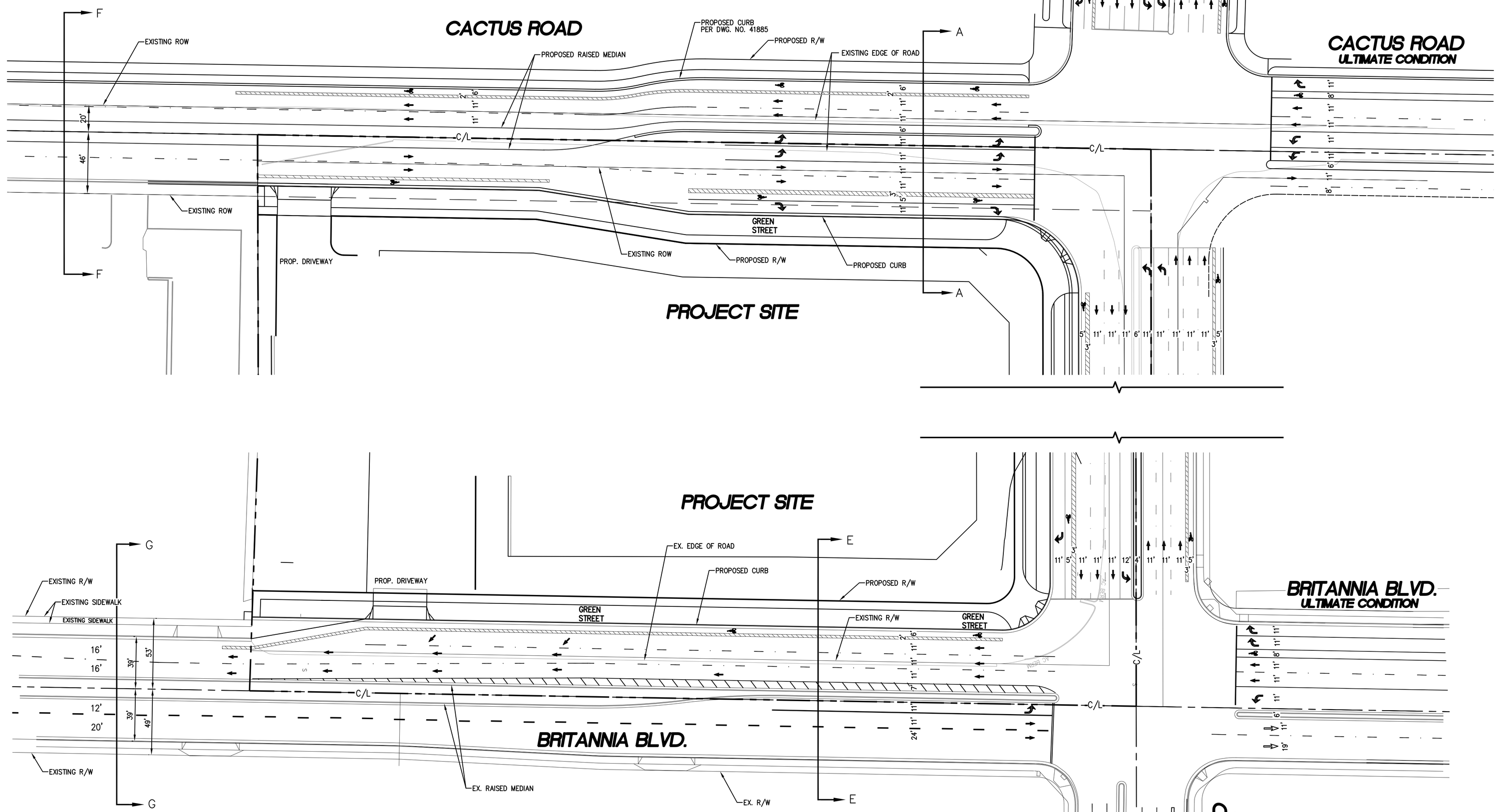
SECTION "F-F"
SECTION EXISTING CACTUS ROAD
NOT TO SCALE



STA. 71+14.88
SECTION "E-E"~ BRITANNIA BOULEVARD
NOT TO SCALE



SECTION "G-G"
SECTION EXISTING BRITANNIA BLVD
NOT TO SCALE



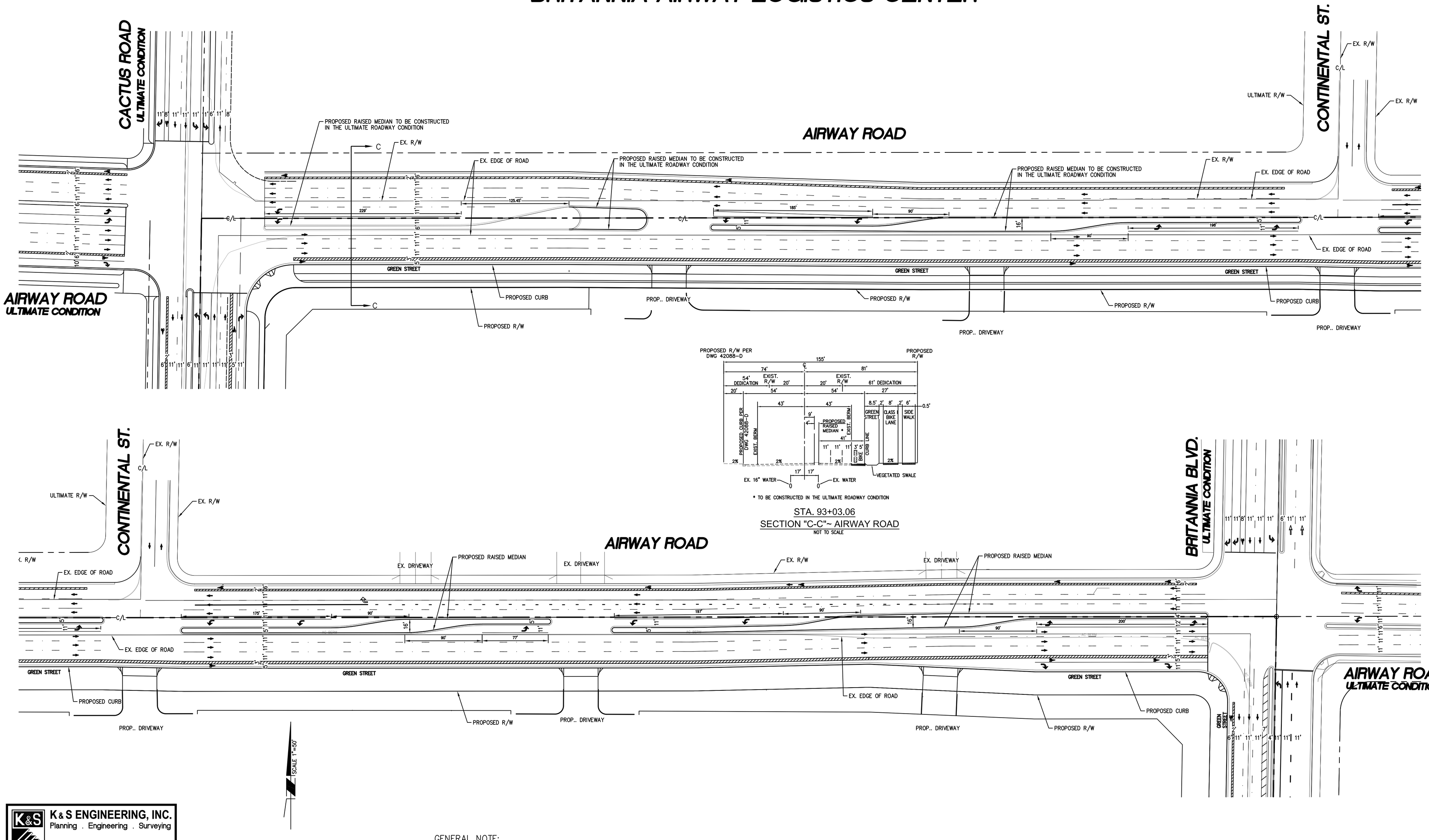
K&S ENGINEERING, INC.
Planning . Engineering . Surveying
7801 Mission Center Court, Suite 100 San Diego, CA 92108
(619) 296-5565 Fax: (619) 296-5564

SCALE 1"=40'

40 20 0 40 80 120
SCALE: 1"=40'

GENERAL NOTE:
THE ABOVE CONCEPTUAL STRIPING PLAN IS SHOWN FOR PRELIMINARY FEASIBILITY AND PLANNING PURPOSES ONLY, NOT FOR CONSTRUCTION. THE FINAL IMPROVEMENT PLANS WILL BE PREPARED AND PERMITTED WITH THE CITY OF SAN DIEGO DURING THE CONSTRUCTION DRAWING STAGE AT A LATER DATE.

CONCEPTUAL STRIPING PLAN FOR:
BRITANNIA AIRWAY LOGISTICS CENTER



STA. 93+03.06
SECTION "C-C"~ AIRWAY ROAD
NOT TO SCALE

K&S ENGINEERING, INC.
Planning . Engineering . Surveying
7801 Mission Center Court, Suite 100 San Diego, CA 92108
(619) 296-5565 Fax: (619) 296-5564

50 25 0 50 100 150
SCALE: 1"=50'

GENERAL NOTE:
THE ABOVE CONCEPTUAL STRIPING PLAN IS SHOWN FOR PRELIMINARY FEASIBILITY AND PLANNING PURPOSES ONLY, NOT FOR CONSTRUCTION. THE FINAL IMPROVEMENT PLANS WILL BE PREPARED AND PERMITTED WITH THE CITY OF SAN DIEGO DURING THE CONSTRUCTION DRAWING STAGE AT A LATER DATE.

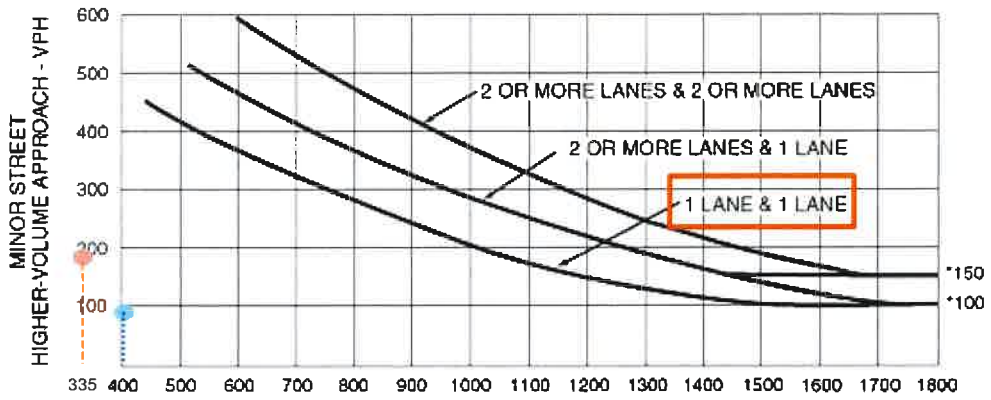
APPENDIX J

AIRWAY ROAD / CONTINENTAL STREET PEAK HOUR SIGNAL WARRANT ANALYSIS SHEET

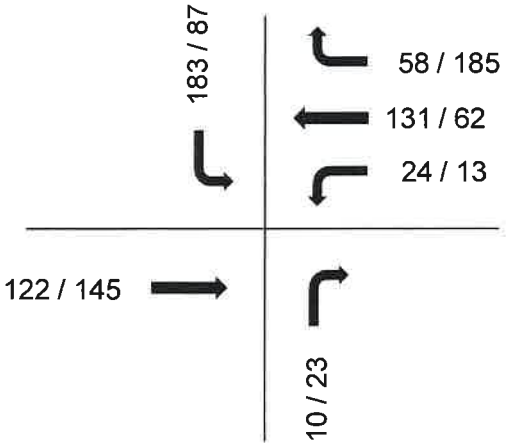
Intersection #5
Airway Road / Continental Street / Project Driveway #4

Near-Term (Opening Year 2023) + Project Traffic Volumes

Figure 4C-3. Warrant 3, Peak Hour



Near-Term (Opening Year 2023) + Project



Major Street
Airway Road

Minor Street
Continental Street (Project Driveway #4)

AM Peak Hour

Minor Street:	183
Major Street:	335

PM Peak Hour

Minor Street:	87
Major Street:	405

RESULT: SIGNAL IS NOT WARRANTED IN THE AM AND PM PEAK HOURS